SUSTAINABILITY LANDSCAPE OF SWEDISH FOOD RETAILERS IN THE EUROPEAN CONTEXT

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[1] FORMAS
[2] Handelns Utvecklingsråd

Executive summary

Problem definition

Food retailers have an important role to play in the transition towards sustainable consumption and production. They are entrusted by society with the management of the food system, with influencing consumer choices, and with raising consumer awareness about products. They are also the players who translate consumer demand for sustainable food into specific strategies for greening supply chains, including suppliers, products and services. Through this process, food retailers engage in defining and socially structuring sustainable consumption.

However, defining sustainable consumption is not an easy task, as it involves balancing multiple interests, such as business priorities, societal and stakeholder expectations and scientific knowledge, on sustainability impact. The critical question is how food retailers manage to convert environmental and social pressures into business opportunities. Current reviews of food retailer practices indicate some discrepancy between societal expectations of retailers, the actual implementation of sustainability strategies, and retailers' own ambitions to develop green markets.

Research question

The main objective of the project was to analyse how individual food retailers can help to create more sustainable markets by:

- Stimulating suppliers to develop and provide products that are more environmentally and socially sound.
- Improving environmental performance and stimulating environmentally sound innovation in the retailers' own local shops, operations, and in their head offices.
- Influencing and helping consumers to choose more sustainable products through innovative information, product placement, labelling, and marketing strategies and tools.

Methodology and research design in brief

This project employed the value chain perspective. We investigated possible pathways towards ecological sustainability in food retail by focusing not only on food retailers and their sustainability-oriented strategies and practices, but also on the way they interact with other players in the chain, namely suppliers and consumers. The project consists of three studies.

The first study examined the ways in which European and Swedish retailers work with their suppliers. The second study analysed how European and Swedish retailers are reducing the impact of their own operations and premises. The third study analysed how European and Swedish retailers are working to promote markets of green products and what more could be done to shape and enable more sustainable consumer choices.

The empirical data were collected through approximately 120 interviews, about 20 observations in local stores, and focus groups with 30 representatives of various stakeholders. Secondary sources of information included corporate data, e.g. annual and sustainability reports, consultancy reports, and academic articles and books.

Main findings

Food retailers are critical players in driving the sustainability of the food chain and in promoting the market for green products. They are often called the gatekeepers, possessing considerable power to introduce sustainability thinking into the value chains. In doing so, they face multiple challenges, starting from conceptualising what sustainability actually means for their own operations, how to strike a balance between business bottom-line, stakeholder pressure and consumer expectations, how to address the risks and uncertainties associated with continually evolving markets and societal demand, and how to turn the sustainability discourse into long-term business opportunities.

This project analysed how food retailers help to create green markets by stimulating supply of more sustainable products, by improving in-house innovation to reduce direct environmental impact from retail operations, and by helping consumers in their daily food choices by providing information, product disposition, marketing and other communication channels.

The study of retailers' strategies *upstream* revealed that one of the most challenging issues for food production and retail is the higher production costs of green products compared to ordinary ones. To resolve this problem, some retailers are compelled to subsidise the end price of green products (usually their own brands), which undermines their business case in the short term. Many food retailers are therefore calling for policy action to set the prices at a level to make environmentally and socially sound products more attractive and competitive on the market, and thereby strengthen the business argument for sustainable consumption.

Another problem identified by retailers is low production volumes of sustainable food products, especially in some product categories, e.g. ecological chicken, or insufficient import of such products, e.g. ecological bananas. If food is produced in Sweden, then the problem is often the limited range of available produce. This narrows the green market in terms of volumes and quality at the right price.

Retailers also play an important role by *greening their own operations*; the innovation process is affected by the organisational structure. By studying the hierarchically-managed Coop and the more decentralised ICA we can conclude that in Coop many ideas are generated or at least mobilised at central level, while in ICA this phase mostly takes place in individual shops, leading to greater flexibility in idea generation. When it comes to the implementation phase, however, Coop's centralised structures and processes seem to be more effective and efficient in exploiting and replicating innovative ideas across its stores. Therefore, organisational structure of food retail chains only partially influences the eco-innovation process; other aspects, such as human factors and management practices at central and store level affect the efficiency of eco-innovation uptake at different levels in the organisation.

Retailers are playing a critical role in *greening markets of products and services*. All the large Swedish retail chains offer various ranges of green products and are also engaged in influencing other parts of the food value chain, including agriculture and food processing. However, markets of green products are still niche markets, ranging between 1% for Fair Trade products and 3.6% for organic products. Green products are still often more expensive than conventional ones and are typically targeted to a small group of consumers rather than mainstream consumers. For some products there is an oversupply of green alternatives, while others experience shortages and cannot satisfy demand. Furthermore, there is lack of clear understanding of what sustainable food actually is and what kind of products consumers should give priority to in terms of a lifecycle perspective, such as local conventionally produced products or green products delivered from distant countries.

The main finding of this study is that, despite the fact that retailers are often perceived as powerful players in supply chains, they do not always have sufficient authority to coercively influence the markets of green products. On the one hand, they sometimes lack power in their relations with suppliers when they want to influence compliance with sustainability requirements. For instance, their power might be constrained in situations when there are few large suppliers on the market, such as in the coffee and fish subsectors, or when wholesale purchasing volumes are low. On the other hand, retailers are also locked-in by the institutional setting, in which green products are more expensive. This leads to the value-action gap among highly environmentally aware Swedish consumers, who are not always willing to pay premium prices for environmental quality.

Recommendations

This situation calls for a more coordinated and holistic approach towards sustainable consumption and production in food retail. Retailers' work should be supported by *policy measures* that would make sustainable food consumption an everyday reality for mainstream consumers, not just for the relatively few people prepared to pay premium prices for healthy and clean food. This may imply levelling off price differences between conventional and green products through various measures.

Other support measures could involve assisting retailers by facilitating the development of third-party sustainability standards and certification schemes, by developing information databases that rank products and suppliers according to their sustainability performance, and by helping to transform production methods towards more sustainable farming. Policy-making could also help the green markets by advancing work on developing sustainable food recommendations and by monitoring green market claims to help avoid misleading claims.

Retailers should advance their collaboration on developing a common approach to defining 'sustainable food consumption' and retailer sector responsibilities towards greening supply chains, including capacity development among suppliers. Collaborative effort is also important for placing clear demands on policy-makers to promote green and sustainable markets. Retailers should further advance their work on greening their own operations, especially when it comes to establishing dedicated management structures and clear communication channels on eco-innovation, as well as disseminating eco-innovation projects to a larger number of stores.

In their communication with consumers, retailers could further diversify their sustainability offers and explore alternative communication channels to attract various consumer segments, e.g. those who value more social distinction and specific lifestyles not necessarily linked to environmental values. To enable this, local stores could assume a more prominent role in contextualising sustainability to link sustainability issues to concerns, interests and lifestyles of various consumer segments in specific locations.

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1 The role of retail in greening markets

1.1 Background

The food sector plays a critical role in the economic and social well-being of European citizens (European Commission 2009a). Food supply chains span three major economic sectors in Europe: agriculture, food processing, and retail industry, representing together over 5% of EU value-added and 11% of EU employment (CIAA 2009). On the downside, food is responsible for a large proportion of household-related environmental impact: 29% of GHG emissions, 58% of eutrophication, 30% of acidification and 32% of eco-toxicity (Tukker et al. 2006: p. 92). European consumers' environmental awareness is growing: 8 out of 10 EU citizens consider environmental impact of products to be an important factor in their decision-making when purchasing (European Commission 2009b).

Retailers have a key role to play in the transition towards sustainable consumption and production. This is on account of their size, consolidated bargaining power, global outreach associated with transnational structure of procurement chains, and strategic positioning at the intersection between supply chain players, especially between producers and consumers (CIAA 2009; Jones et al. 2011).

In most European countries, the retail sector has undergone a market concentration process that has resulted in an oligopolistic structure where a few leading retailers hold a significant market share. Retailers therefore become *de facto* agents of change, entrusted by society with the "management and policing of the food system and in the social structuring of consumption" (Wrigley 1993: 1545). The European Commission (2010, p. 13) attests that retailers have "enormous power to raise awareness and influence shopping choices". Governments and other stakeholders across Europe have therefore initiated attempts[3] to influence retail practices and to better understand what role they could play in achieving sustainable food consumption. Another view is that "retailers take up a position in connecting innovations upstream with downstream dynamics and vice versa. They have to translate the consumer demand for sustainable food into changes that fit the configuration at the supply side and program a configuration of food products and related services that fit consumer concerns and their lifestyles" (Oosterveer 2012: 159).

Defining sustainable food consumption is not an easy task. Understanding sustainable food is a co-evolutionary process: institutional structures and technology on the one side, and knowledge, meanings and preferences on the other influence each other, and change through constant interaction between players in the food system. For example, when retailers choose what aspects of sustainable food consumption to focus on, they often need to consider existing scientific knowledge relating to food, stakeholder pressure relating to prevailing issues, and their own business priorities and economic rationales (ETC/SCP 2009). All this makes the responsibility of retailers for different aspects of sustainable food consumption unclear; for example, retailers may wonder whether promoting a vegetarian diet, more sustainable food delivery to households, or food waste reduction at home is their responsibility (Boström and Klintman 2011).

This puts retailers in a difficult position, where they need to satisfy both stakeholders and the market (Jones et al. 2011). As gatekeepers of the supply chain, while being restricted by societal debate, retailers are said to face considerable risk and uncertainty when trying to implement

[3] Examples: the EU's 'Retail Forum', the Nordic Council's 'Retail Forum on Sustainable Consumption and Production', and the 'Visioning Sustainable Retail' workshops in the UK.

sustainability in their operations (Durieu 2003). How they handle it depends, for example, on the market, but also on their ability to translate environmental and social pressures into business concepts and opportunities. Retailers often need to strike a delicate balance between following the societal discourse, and thereby making sustainable consumption meaningful to their consumers, while ensuring that this does not have a negative impact on their business interests.

On the other hand, it is precisely their gatekeeper role that gives retailers a key role in advancing sustainability of consumption and production in the food sector (European Commission 2008). By being in direct contact with consumers, and by offering typically several thousand products in their shops, retailers exert significant influence on consumer choices, but also on how they use and dispose of products and packaging. They may utilise the opportunity to edit their assortment by selecting and deselecting products, thereby actively affecting and shaping the sustainable options available. At the same time, retailers are in contact with direct and indirect suppliers worldwide, including food producers and distributors, and are therefore in a position to promote green and fair production of environmentally and socially sound products. Retailers are also consumers who can support transition to sustainability by choosing green products for their own operations (ETC/SCP 2010).

A growing number of major retailers claim to be integrating sustainability into their core business strategies, and some have even exceeded consumer expectations. However, the full potential of retailers to encourage sustainable consumption and production has yet to be realised, as current environmental initiatives are still seen to be fragmented and unsystematic in terms of the overall market (BIO Intelligence Service 2009; Knickel et al. 2010). Some studies show that very few, if any, European retailers can demonstrate implementation of a broad range of sustainability initiatives by the majority of their shops (Chkanikova and Mont 2010; ETC/SCP 2010).

There seems to be some discrepancy between societal expectations of retailers, retailers' own ambitions to drive sustainability and develop green markets, and the actual implementation of sustainability strategies. A number of third-party reports that have examined retailer sustainability achievements point out the gap between the rhetoric (what is theoretically possible) and the reality of retailers' initiatives to promote green product chains (European Commission 2010; European Commission 2011).

Sustainable sourcing practices in food retailing are still insufficiently addressed, as shown by the low percentage of trade in sustainable food commodities. Despite the continuously growing European and Swedish market for green products, the actual size of the market is still very small. In Sweden, for example, the market for green products makes up 3.6% of the food retail market (Ekoweb 2013). Explanations include the lack of in-depth knowledge and developed strategies for addressing sustainability issues in supply chain operations (CSCP and UNEP DTIE 2007; Smith 2008; Forum for the Future 2009; ETC/SCP 2010). Other reasons mentioned by retailers are lack of support from policy-makers for sustainability transitions specifically in the retail sector, and unreliable support from consumers, who find it difficult to vote with their wallets in shops by choosing often more expensive green or ethical products.

1.2 Objective of the project

The main objective of the project was to analyse how individual food retailers can help to create more sustainable markets by:

- Stimulating suppliers to develop and provide products that are more environmentally and socially sound, and by choosing which products to sell in their shops. Retailers can either stop selling products with detrimental environmental and social impact or increase the percentage of more sustainable products in their shops (choice editing).
- Improving environmental performance in their own shops and operations and by stimulating environmentally sound innovation in local shops and in their head offices.
- Influencing and helping consumers to choose more sustainable products through innovative information, product placement, labelling, and marketing strategies and tools. In shops we will examine how consumers perceive the information provided, whether it influences their purchasing decisions, and how retailers can use the findings.

The aim of the project was to promote sustainability strategies in the food retail sector at head office and local store levels.

1.3 Research design

This project was carried out employing the lifecycle perspective that advocates the importance of analysing sustainability-related problems along the value chain. We investigated possible pathways towards ecological sustainability in food retail by focusing not only on food retailers and their sustainability-oriented strategies and practices, but also on the way they interact with other players in the chain, namely suppliers and consumers.

The project consists of three studies. The first study examined the ways in which European and Swedish retailers work with their suppliers. The second study analysed how European and Swedish retailers are reducing the impact of their own operations and premises. The third study analysed how European and Swedish retailers are working to promote markets of green products and what more could be done to shape and enable more sustainable consumer choices. Various methods for data collection were used in the studies to enable triangulation of data, i.e. data from various stakeholders and data collected from different sources and methods can be compared and checked against each other.

Study 1 focused on practices of sustainable sourcing and supply chain management in three major Swedish food retail chains. To collect empirical data on sustainable sourcing in central retail organisations, we conducted in-depth case studies of two Swedish supermarket chains, Coop and Axfood. In each case study, we interviewed both purchasing and sustainability managers in the central retail organisation. Specific attention was directed towards the practice of sustainable sourcing in two product categories, namely fresh fruit and vegetables and coffee. We chose these categories because of the structural differences in the respective supply chains, and to help us examine what can affect a food retailer’s approach when greening a supply chain.

In addition to the two case studies, we interviewed personnel at ICA (Sweden), Waitrose (UK), and Irma (Denmark). Sixteen semi-structured interviews were held with practitioners involved in sustainable sourcing in central retail organisations. Questions were aimed at mapping the characteristics of the purchasing context, understanding the relationship management approaches with suppliers to implement sustainable purchasing, and gaining insights into challenges relating to increasing the proportion of sustainable products purchased. Secondary data sources, e.g. retailer’s public communications, third-party reports and academic articles, were also reviewed and incorporated in the analysis where applicable.

To collect empirical data on sustainable sourcing in stores, we held 20 interviews with individual store owners/managers. The majority of individual stores included in the study belong to one of the large retail chains, but interviews were also held with owners of independent stores with a particular focus on green products. The interviews were designed to gather data about store owners'/ managers' perceptions about customer demand for green products, the range of green products in the stores, the supply services provided by the central retail organisation, and shop-level sourcing initiatives relating to green products.

Study 2, about innovation processes in the retail sector, was based on a literature review and case studies of Coop and ICA. These case studies involved interviews with representatives at shop and central level, and reviews of corporate documentation. The literature review analysed theories relevant to innovation process studies. The review allowed us to identify a variety of organisational structures, which in essence led us to a decision to focus on two organisational models – centralised and decentralised.

The literature review was supplemented by case studies. We decided to study Swedish food retail shops with dominant market positions but with different organisational structures; Coop and ICA were selected for this. The data was collected through face-to-face semi-structured interviews with store managers or owners in the Lund and Malmö area, floor employees, and representatives of top management in the head office. These interviews involved 10 Coop stores, 15 ICA stores, and 2 central level managers of Coop and ICA corporate offices.

The interviews were not intended to provide statistically reliable material in terms of sample size and degree of representation of Swedish retail. Instead this survey should be regarded as explorative for the purpose of identifying possible patterns and knowledge gaps that could be useful in formulating further research needs. The responses were analysed with the aim of identifying similarities in innovation priorities, the ways environmental improvements are being made within the organisation, how these depend on the roles and responsibilities of the interviewee and, if applicable, how it relates to the organisational structure and management procedures in each company.

Study 3 aimed at increasing understanding of retailers' efforts to promote sustainable consumption. Interviews were held with all major Swedish retailers, as well shoppers and relevant stakeholders (e.g. Konsumentföreningen Stockholm, KRAV and Svanen ecolabels). At central retail level, the sustainability representatives of five of the six dominating Swedish retailers (ICA, Coop, Axfood, Bergendahls and Netto) were interviewed. Three interviews were held with foreign retailers (Tesco, UK; Billa, Austria; Irma, Denmark). Sixteen interviews were held with shop representatives (owners, managers, and employees), mostly in Southern Sweden (Malmö, Lund, Södra Sandby) but also in other parts of the country (Uppsala, Östersund area). In conjunction with interviews involving store managers/owners, 32 interviews were held with randomly-selected shoppers (consumers) at some of the shops previously interviewed. All interviews were based on a questionnaire but responses were open and deviation from the questionnaire was permitted. Sixteen in-depth store observations (including field notes) were conducted in Swedish retail stores, and a number of undocumented store observations conducted before/after interviews and in connection with store visits.

Finally, two focus groups were set up for this study. One focus group was held in Lund, bringing together a total of 18 participants, including store owners/managers, consumers and stakeholders (i.e. municipalities, NGOs). The second focus group was held in Stockholm, with 12 participants representing central retail organisations (Hemköp, Axfood, KF/Coop) and stakeholders (e.g. Svensk Dagligvaruhandel, KRAV, Sveriges Konsumenter).

The empirical data collection in the project is summarised in the table below.

Table 1 Overview of data collection methods and samples

	Upstream	In-house	Downstream
Case studies	Coop and Axfood: practice of sustainable sourcing.	Coop and ICA: cases of innovation processes in retail at shop and central level.	Coop, ICA and Axfood: retailers' initiatives to promote green products to consumers.
Interviews with stores	16 semi-structured interviews in central retail organisations of Coop, Axfood, ICA, Waitrose (UK), and IRMA (Denmark). 20 interviews with individual store owners/managers in ICA and Coop and specialised green stores.	27 semi-structured interviews with 10 Coop stores, 15 ICA stores and 2 central level managers of Coop and ICA corporate offices.	7 semi-structured interviews with central levels of ICA, Coop, Axfood, Bergendahls and Netto. 3 semi-structured interviews with Tesco (UK), Billa (Austria), Irma (Denmark). 16 interviews with shop representatives (owners, managers, employees), from Malmö, Lund, Södra Sandby, Uppsala, Östersund. 32 interviews with consumers in ICA, Coop and Netto stores.
Observations	-	10 Coop stores and 15 ICA stores.	16 store observations in Swedish retail stores (ICA, Coop, Axfood, Bergendahls and Netto).
Focus groups	Two focus groups: 1) in Lund with 18 participants, including store owners/managers, consumers and stakeholders (i.e. municipalities, NGOs); 2) in Stockholm, with 12 participants from central levels of Hemköp, Axfood, KF/Coop and stakeholders (e.g. Svensk Dagligvaruhandel, KRAV, Sveriges Konsumenter).		

1.4 Scope of the project

The project mainly focused on the grocery sector in Sweden, but also examined European food retailers and the way they address environmental and sustainability issues in their strategic and operational work. The original focus was on the ICA retail chain, but in the course of the project we also studied Coop as the retailer with the longest history of sustainability work in Sweden, and Axfood as the fastest growing newcomer among retailers that actively work with sustainability.

The project investigated how retailers address sustainability-related challenges at the level of central retail organisation (head office) and at the level of individual stores. The objective was not to evaluate or judge whether retailer initiatives are sustainable or not, but rather to show a landscape of practices that are often perceived as facilitating sustainability of retail organisations and healthy markets. These practices include improving efficiency and reducing environmental and social impacts of their own operations, and sourcing and providing to the markets products and services with reduced environmental and social impacts.[4]

[4] Overview of retailers' practices can be found in this publication from the project: Chkanikova, O. and O. Mont (2011), *Overview of sustainability initiatives in European food retail sector*. Lund, International Institute for Industrial Environmental Economics at Lund University, pp. 40.

1.5 Target groups

This report will be useful for:

- Large retailer chains and small independent retailers in Sweden and Europe,
- Trade associations, such as Svensk Handeln,
- Organisations supporting the development of Swedish retail sectors, e.g. Handelns Utvecklingsråd,
- Decision-makers working with retail and with issues of green markets and sustainable consumption,
- Researchers who study sustainability practices in food retail, and
- Private individuals interested in sustainability-related issues associated with food retail.

1.6 Report outline

Chapter 2 outlines the main trends in the food retail industry at European level and in Sweden. The drivers and barriers for food retailers to engage with sustainability governance work are presented, and a brief overview of best practices for reducing environmental and social impacts from the food retail sector is provided. The review highlights retailers' initiatives upstream (their work with suppliers), in-house (retailers' own operations including inbound logistics) and downstream (retailers' strategies towards consumers).

Chapter 3 describes and analyses sustainable sourcing practices of Swedish food retailers, both at central retail organisation level and at store level. In evaluation of practices to green a supply chain, specific attention is given to the role of the purchasing context, namely supply and demand characteristics, any certification schemes, and nature of dependency on relevant suppliers.

In Chapter 4 the focus is on in-store innovation processes, and examines how corporate organisational structure influences the innovation process. The innovation processes examined concentrate on eco-efficiency improvements in the retail operation, i.e. resource efficiency of energy and water utilities, as well as waste management.

Chapter 5 provides an overview of strategies that retailers in Sweden and abroad have adopted to deal with downstream (i.e. customer-oriented) challenges. The chapter illustrates how retailers use their own brands, market niches, marketing, and the in-store environment to align two realities they encounter – stakeholder expectations and customer demand – that often seem incompatible.

Chapter 6 outlines future trends of relevance for sustainability work in food retail. These were identified and discussed in two focus groups with representatives of Swedish food retailers (e.g. Coop, ICA and Axfood, and small independent eco-food shops), individual consumers, and representatives of retail industry associations, eco-labelling organisations, and consumer interest organisations.

Chapter 7 presents the main conclusions of the project and provides recommendations for how Swedish food retailers can advance markets of green products upstream, in-house and downstream.

2 Food retail landscape

2.1 Main trends in food retail

Food retail sales traditionally account for the largest proportion of total retail sales; for example they represent 75% of total retail sales in the UK, almost 70% in Germany and 40% in Italy (Hristov et al. 2004). Major characteristics of the food retail market include market concentration, leading to oligopolies in many countries, and increasing spatial concentration of physical shopping infrastructures; growing vertical integration towards food manufacturing and agriculture; increasing market shares of discounters; and slow increase of ecological, organic and ethical food markets in some European countries, including Germany and France, but decline in the UK.

The oligopoly is clearly visible in Sweden and several other countries (e.g. Finland, Slovenia, Ireland, Estonia, Austria, Germany, France), where the top five retailers hold more than 95% of the grocery market.

Together with consolidation of retailer markets, another trend is *vertical integration* where retailers increasingly participate in agriculture and food production through contracting or ownership structures. This process allows retailers to increasingly integrate environmental and social criteria in their supply contracts or their choice of contractors, especially in the case of own-branded product lines, such as *Änglamark*, *I Love Eco* and *Garant* in Sweden.

There is also a trend of *horizontal integration* where food retailers are broadening their product portfolio. For example, in the 1960s an average European grocery had 2,000 product lines, while a modern supermarket today often has more than 15,000 product lines (UNEP 2006). Some large European supermarkets showcase up to 45 000 products. In order to further increase their product portfolio, including a variety of green and Fair Trade products, and enter new markets, e.g. healthy and wholesome foods, retailers are utilising their brand reputation, organisational know-how, and internal logistics capabilities.

The number of traditional food shops is generally decreasing in favour of *supermarkets*, *hypermarkets*, *outlets*, and *discount outlets.* Between 1991 and 2005, the number of European discount grocery stores increased from 17,300 to more than 34,000 (BCG 2006). In Sweden and Finland, discount stores account for only about 10-13% of the retail trade, compared to 40% in Germany, but sales volumes in discount shops have tripled over the last ten years (GAIN 2008). Of the 25 top-performing European retail brands, 60% offer own-brand products that contribute between 30% and 100% of their revenue (Interbrand 2008). In Sweden the top three food retailers, Coop, ICA and Axfood, are continuously increasing volumes and range of own-brand products.

International sourcing of food products is growing, not only for exotic foods but also for foods produced in European countries. This is motivated by lower labour costs in countries outside Europe.

A growing trend in food retail is *online purchasing*, but it still represents only 1% of the total food sales in Sweden, although it grew by 25% in 2012 (Delfi et al. 2013).

Another trend is *relocating general and food retailers* in large cities to city outskirts close to transport nodes. Large commercial facilities are more efficient in terms of logistics, but they also tend to affect not only consumers' mobility patterns, but also consumers' food shopping routines. There is an observed shift from frequent food shopping on foot in local stores to weekly shopping by car at large shopping centres situated outside city centres. A small but growing number of families are testing ordering their weekly food shopping online and getting their food delivered to their home.

Green and Fair Trade food is still a niche market, and the overall market share is less than 2% of the European food market. In Sweden, green products make up about 3.6% of the market (Coop 5.14%, ICA approximately 3% and Axfood 2.8%) (Ekoweb 2013). However, there are concerns that the market for green products did not grow as fast as expected in 2012, as both ICA and Coop report a somewhat slower growth, although Axfood saw a 7% increase in sales of ecological products (Ekoweb 2013). Denmark is one of the leaders in terms of green products in the retail trade (8%). This shows the potential available to Swedish food retail chains to increase their sales of green and ethical products.

2.2 Drivers and barriers for Swedish food retailers to engage in sustainability practices

Retailers operate in a highly dynamic and competitive environment. They need to find an intricate balance when navigating the stormy waters of societal pressures, their own business priorities, environmental and social impact, and expectations of various stakeholders. While societal drivers encourage retailers to engage with the sustainability agenda, there are also a number of barriers that prevent retailers from advancing their work on sustainable consumption and production. So what are these drivers and barriers that retailers are facing? They can be divided into 4 groups: regulatory, market, resource and social factors.

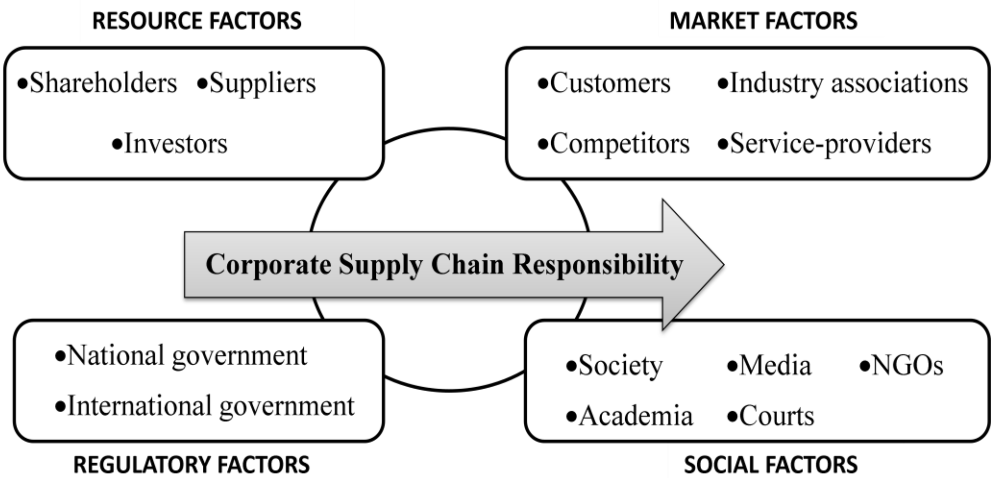

Figure 1. Drivers and barriers relating to corporate supply chain responsibility. Based on taxonomy of institutional factors suggested by Hoffman (2000).

2.2.1 Drivers of sustainability work

Various types of drivers have been identified that encourage retailers to initiate, maintain and expand their environmental and sustainability work along the value chain (BIO Intelligence Service 2009; Forum for the Future 2009).

Regulatory factors

The regulatory environment is important for improving sustainability performance in the retail industry. For example, agricultural policy, eco-efficiency initiatives and labelling standards drive retailers' upstream activities. EU and Swedish food and agricultural import legislation include restrictions on chemicals and pesticide use, recycling provisions for food packaging, and permitted levels of radioactivity and residue levels for dioxins in fish (Wideback 2012).

European and Swedish food safety standards and energy regulations, as well as sustainable construction criteria and waste management for packaging and food waste, trigger a wide range of in-house retailer activities and management schemes.

Policies driving retailers' downstream initiatives are often voluntary in nature and include instruments for providing information through labelling standards and campaigns for promoting green and Fair Trade products. EU labelling regulations make retailers responsible for ensuring that products are labelled correctly. In Sweden this resulted in retailer collaboration with governments and service-providers to verify food claims and monitor that eco-labels are awarded in accordance with regulatory requirements of sourcing countries, particularly for retailers' own brands.[5]

International agreements and national action plans further influence incorporation of sustainability criteria into retailer sourcing practices. For instance, the UN Declaration of Human Rights and International Labour Organisation conventions serve as references for defining minimum criteria regarding labour conditions and fair wages at supplier facilities.

In addition, the Sustainable Consumption, Production and Sustainable Industrial Policy Action Plan adopted in 2008 resulted in the European Retail Roundtable (ERRT) being set up in 2009. ERRT represents a voluntary forum for EU retailers to promote sustainable production and consumption practices and to discuss associated challenges (European Commission 2009c). Only ICA of the Swedish food retailers is involved in ERRT. On 24 June 2010, ERRT adopted a voluntary Retail Environmental Sustainability Code that aims to systematise sustainable sourcing approaches across the European retail sector, but it is only applied to specific product categories.

Anticipation of regulation is also an important driver for European and Swedish retailers. For example, expectations of carbon management regulations initiated corporate actions to reduce GHG emissions and explains the work of retailers to compile product carbon footprint inventories. ICA has clearly accounted for this concern in its annual report (ICA Group 2010: p. 17):

> *"Society's growing awareness of climate change is likely to result in new laws and regulations, which in turn affect our operations financially and physically. We continuously monitor these issues so that we are ready to quickly adapt. Important areas include emissions limits on goods transports, taxes that lead to more expensive fossil fuels and society's transition to renewable energy sources".*

Market factors

Unlike the carbon management initiatives of retailers that are driven by expectation of regulatory drivers, many other issues such as sourcing fish, meat and green products, are driven by market demand.

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[5] Smith, M. (2011). Personal communication with Head of Environmental and Social Responsibility at ICA. Conducted by O. Chkanikova, Lund, 28-2-2011.

Increased consumer demand for healthier and sustainable diets is one of the primary drivers for Swedish food retailers' engagement with sustainable sourcing activities.[6] Although the majority of interviewed Swedish retailers have stressed that *"launching of sustainable sourcing policies is very much consumer-driven"*,[7] it has been also acknowledged that the role of this driver is rather limited due to relatively low level of sales in the sustainable product category.[8] In some issues, however, consumers are taking an active stand and participate in boycotts or campaigns against specific companies or products, e.g. overfished tuna (Gunn and Mont 2013).

Enhanced brand value through green product differentiations and corporate image as 'responsible citizen' are also associated with an opportunity to increase profit margins. Corporate image and credibility are also important drivers for improved business performance, especially in the current climate of increasing awareness in society about environmental and sustainability issues. For example, Coop, which has been leading Nordic markets for environmentally sound products for more than two decades, sees strategic importance in creating and supporting future markets by subsidising sustainable products and helping consumers to make environmentally and socially aware purchasing choices. ICA followed Coop's work on sustainability issues and now believes that working with sustainability is a natural part of building strong brand value. Both companies express the need to continue working pro-actively with sustainability in order to maintain the reputation they have already built up.

In this way, leading companies create pressure for other food retailers on the market, who feel that the leading companies increase consumer expectation that all market players engage in sustainability work.

Resource factors

Financial incentives and potential savings are the most important drivers in sustainability work according to Swedish retailers. Increasing resource efficiency improves profit margins and reduces costs (e.g. water, energy and material use) and drives sustainability initiatives in the areas of logistics improvement, reduced food miles, and the volume of waste generated in supply chains.[9]

Executive commitment and organisational values were mentioned as important drivers and precondition for Swedish retailers to engage with sustainability. Employees sometimes become a

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[6] Galliano, A. (2011). Personal communication with Sourcing Manager at the People's Supermarket, UK. Lund, Chkanikova, O.; Domeij, A. (2011). Personal communication with Head of Environmental and Social Responsibility at Axfood. Conducted by O. Chkanikova, Lund, 21-10-2011; Robertsson, M. (2011). Personal communication with Head of Sustainability at Coop. Conducted by O. Chkanikova, Lund, 3-3-2011; Dahlberg, A.-L. (2011). Personal communication with Head of Quality and Sustainability in Purchasing at Coop. Conducted by O. Chkanikova, Lund, 25-10-2011.

[7] Dahlberg, A.-L. (2011). Personal communication with Head of Quality and Sustainability in Purchasing at Coop. Conducted by O. Chkanikova, Lund, 25-10-2011.

[8] Clark, Q. (2011). Personal Communication with Head of Sustainability and Ethical Sourcing at Waitrose. Conducted by O. Chkanikova. Lund. 31-8-2011; Domeij, A. (2011). Personal communication with Head of Environmental and Social Responsibility at Axfood. Conducted by O. Chkanikova, Lund, 21-10-2011; Robertsson, M. (2011). Personal communication with Head of Sustainability at Coop. Conducted by O. Chkanikova, Lund, 3-3-2011.

[9] Smith, M. (2011). Personal communication with Head of Environmental and Social Responsibility at ICA. Conducted by O. Chkanikova, Lund, 28-2-2011; Domeij, A. (2011). Personal communication with Head of Environmental and Social Responsibility at Axfood. Conducted by O. Chkanikova, Lund, 21-10-2011; Robertsson, M. (2011). Personal communication with Head of Sustainability at Coop. Conducted by O. Chkanikova, Lund, 3-3-2011.

driver in sustainability work especially in cooperatively owned retailers, e.g. Coop, which is primarily guided by the needs and enquiries of its owners-members.

Increased investor interest in food retailers that can demonstrate their concern for sustainability might also motivate retailers' efforts to green product chains upstream and downstream. For instance, Triodos Bank has recently screened 20 listed supermarkets with the aim of identifying those organisations that are worth investing in on the grounds of sustainable food stock. The screening process includes benchmarking with sustainability criteria, such as share of sustainable products in the overall product assortment and consideration of animal welfare issues in the procurement process (Triodos Bank 2010).

Social factors

NGOs often drive retailers to address specific sustainability issues upstream in the supply chains. In response, retailers prefer more long-term cooperation with NGOs, e.g. the Swedish Society for Nature Conservation, WWF and Greenpeace, which allows them to elaborate on sustainability sourcing strategies.[10]

NGO campaigns and media attention to sustainability issues create the risk of negative publicity and may thereby weaken the competitive position of retailers. This, in turn, causes problems for longer-term profitability if a company does not meet stakeholder expectations. Among noticeable examples are WWF initiatives to promote trade of sustainable fish (WWF Global 2011a) and responsible soy (WWF Global 2011b) by 'naming and shaming' irresponsible retailers and their sourcing methods. Media support for sustainability and risk of negative media exposure encourages retailers to address environmental and sustainable issues.

Scientific alerts about environmental impacts of food products also raise awareness among retailers and consumers and help identify the most critical areas for their engagement.

2.2.2 Barriers to sustainability work

There are a number of barriers to retailers engaging in sustainability work.

Regulatory factors

The largest Swedish retailers see higher prices of green products as the main barrier to increasing the proportion of green and ethical products on the market. Specifically, retailers view the lack of Environmental Tax Reform and other policy instruments to incorporate environmental and social externalities into product costs, and perverse subsidies to unsustainable agriculture practices, as significant barriers. Coop specified these barriers as follows:

> *"The lack of sufficient support to the frontrunners in primary production and the processing industry places a heavy responsibility on the retailers to support and encourage environmental improvements upstream in the product chain."*

[10] Smith, M. (2011). Personal communication with Head of Environmental and Social Responsibility at ICA. Conducted by O. Chkanikova, Lund, 2011-2-28; Domeij, A. (2011). Personal communication with Head of Environmental and Social Responsibility at Axfood. Conducted by O. Chkanikova, Lund, 21-10-2011.

In addition to the upstream barrier, there is also a barrier that hinders retailers' work downstream. Rather than capitalising on the first-mover advantage, Swedish retailers are often disadvantaged by the immature market that is not supported by economic policies that internalise environmental and social costs. They therefore have to compensate for policy inadequacies by creating their own strategies for attracting consumers, such as by subsidising environmentally and socially sound products and/or by reducing their own profit margins.

Market factors

One of the main barriers is the gap between consumers' sustainability awareness and their willingness to pay for more environmentally and socially sound alternatives. This is linked to the barrier of lacking internalisation of environmental and social costs in the product price. According to Coop,

> *"Small production volumes and higher production costs are two main factors for higher prices of green products compared to ordinary ones".*

Another often mentioned problem is consumer confusion about the large number of various labels that all signal various types of product sustainability: environmental, ecological, organic, Fair Trade, ethical, Rainforest Alliance, EU flower label and KRAV, keyhole label and a range of newcomers communicating healthy and whole food features, as well as various labels signalling carbon footprint or food miles, to name just few. There is also a growing number of labels communicating sustainability features of own-brand products, such as *Änglamark*, *I Love Eco*, and *Garant*.

An internalisation trend (Sandberg 2010) was also highlighted as a barrier, as it leads to a more global and complex structure of food supply chains, making it more difficult to introduce and implement environmental changes in the global chains.

New popular store formats – discounters, hypermarkets – are emerging and they sometimes imply lower sustainable standards, e.g. poor input tracking, lower intrinsic quality, and long supply chains due to lower prices at discount outlets (ETC/SCP 2010). Hypermarkets, with their wide range of product lines, may face more complexity in prioritising and managing sustainability issues (BIO Intelligence 2009).

Resource factors

Financial resources are one of the main barriers to systematic sustainability work. Working with players upstream and downstream requires long-term strategic investment in personnel training and relationship management, often with players based in other countries and working within very different legislative and economic frameworks. In general, the Swedish retailers have mentioned a lack of systematic work with environmental issues among suppliers.

In-house work on improving efficiency of internal processes, e.g. replacing old equipment with more efficient versions, such as ventilation and refrigerator systems, often has long payback periods and relatively low efficiency savings, again due to externalised environmental costs for energy, water and waste management.

Unstable supply of green and ethical products has been named by all the retailers as a problem in maintaining and supporting an environmentally and socially aware customer base. Some specific product categories have problems with supply, including organic chicken and ecological and Fair Trade bananas. In these categories the limited supply of ecological products limits the demand.

High costs associated with environmental certification and production of greener products has also been named as a barrier, and the retailers' solution has been to increase the number of their own-branded green and ethical products.

One barrier identified by retailers at store level is lack of personnel training about social and environmental aspects of products.

3 Upstream activities of Swedish retailers to promote sustainability

This chapter provides an overview and analysis of how Swedish food retailers are working to green upstream product chains, i.e. how food retailers manage product-related sustainability issues that arise in production, processing, packaging and distribution phases.

The chapter is structured as follows. In the introduction we present three major corporate tasks that are critical when implementing upstream sustainability: 1) defining sustainable choices, 2) exerting positive influence, and 3) verification of compliance. We then describe how Swedish food retailers are working to accomplish each of these tasks. The description of sourcing practices is followed by analysis of how retailers are working to manage the supply base to improve upstream sustainability.

The study describes and analyses green sourcing practices in both the central retail organisation and at store level. Specific attention is given to the role of the purchasing context, which can be either conducive or prohibitive for the food retailer's ability to influence products and suppliers' sustainability performance. The lessons derived from analysis of retailers' sustainable sourcing practices are presented in the form of challenges that were discussed by interviewees. The chapter concludes with recommendations for policy-makers and food retail practitioners as to how they can overcome these challenges, as well as suggestions for future research.

3.1 Introduction: critical corporate tasks for greening a supply chain

In recent years European and Swedish retailers have started to become more active in launching sustainability initiatives upstream in their supply chains (Forum for the Future 2008; BIO Intelligence Service 2009). Issues that have received widespread attention include food safety, animal welfare, local produce and ethical trading (e.g. human rights, social welfare and Fair Trade standards) (Jones et al. 2005).

Retailer work to green product chains can take various forms, such as sourcing products with lower environmental profiles (e.g. local and organic), placing requirements on and/or collaborating with suppliers to reduce environmental impacts, and choice editing, i.e. phasing out products with high environmental impact (Chkanikova and Mont 2010).

When greening a supply chain, companies usually face three distinct tasks (Kogg 2009):

1. ***Defining sustainable choices***. The primary challenge to greening product chains relates to the complex and contentious nature of the sustainability debate, along with ambiguous stakeholder demands. This makes it particularly difficult to decide on priority areas for sustainability activities in supply chains.

> *"On the one hand, there is the organic issue, but on the other hand when you are talking about carbon footprint agenda, the organic is carbon-intensive. The challenge is to define what is sustainable, how relevant and urgent the issue is, and whether it is just a fashionable fact or true sustainability".*[11]

[11] Clark, Q. (2011). Personal communication with Head of Sustainability and Ethical Sourcing at Waitrose. Conducted by O. Chkanikova, Lund, 31-8-2011.

The task of defining what is sustainable is further complicated by a lack of unified methodologies for evaluating environmental and social impacts of products. Another problem is the lack of technical expertise about food production processes, making it difficult to develop sound product and supplier performance requirements.

To obtain more information, retailers ask their suppliers to report on product- and process-related environmental and social issues, but reporting quality, including access to verifiable information, is often described as inadequate. Food retailers also mentioned that substantial financial resources were required to carry out environmental evaluations of various product categories in-house.

2. ***Exercising a positive influence in the supply chain.*** Greening product chains implies a high level of engagement between food retailers and suppliers. It requires significant input of time and money to communicate sustainability specifications, and to support and motivate suppliers to incorporate environmental and social criteria into product and process design. Food retailers also reported cases where they have insufficient power to exert influence over product and supplier sustainability performance. Indeed, increasing concentration in the producing and processing industry, e.g. coffee, fresh and processed fish, might counteract the power of food retailers (Aragrande et al. 2005). Previous research supports the argument that the buyer's efforts to enforce and motivate sustainability innovation at supplier level might be constrained due to unfavourable power circumstances derived from the nature of relative dependency in buyer-supplier relationships (Cox et al. 2001).

3. ***Exercising control over relevant aspects in the supply chain to ensure compliance with green/social criteria.*** To differentiate green products on the market and thereby make sustainable sourcing a profitable initiative, the retailer needs to be able to communicate to consumers why certain products are better from a sustainability perspective. If retailers want to ensure that suppliers follow sustainability requirements, they need to establish or outsource services for control and verification of product and supplier compliance with sustainability criteria. Verification of compliance is further underpinned by food labelling regulation; this makes food retailers responsible for ensuring that food products available in stores are labelled correctly.

However, the task of monitoring and verifying compliance is particularly challenging due to credence quality attributes of sustainable products. Credence characteristics cannot be controlled through inspection of purchased items; on-site inspection of the supplier's facilities is necessary. Auditing of suppliers is particularly difficult from the food retailer's perspective in view of the sheer number of suppliers involved and the globally dispersed structure of the product procurement networks. Swedish supermarkets also reported that supplier auditing is costly and requires a high level of expertise, e.g. knowledge of local legislation and local conditions.

The following section describes in detail how Swedish food retailers deal with each of the three fundamental tasks associated with greening product chains, namely 1) defining sustainable choices; 2) exercising a positive influence in the supply chain; and 3) exercising control over relevant aspects in the supply chain to ensure compliance with green/social criteria. In the description of how Swedish food retailers green product chains, particular focus is given to the role of certification institutions that standardise approaches for sustainability-related product and supplier assessment.

3.2 Sustainable supply chain management in Swedish food retailing

3.2.1 Defining sustainable choices

Central retail organisation

Defining sustainability criteria is not a straightforward process, and it is affected by factors such as consumer interests, long-term profitability, life-cycle assessments, and media alerts. Among the factors that influence the introduction of sustainable sourcing criteria, respondents identified business case and consumer uptake of green products as the most important ones.

In defining what is sustainable, the interviewed supermarkets relate to requirements in Swedish food and agricultural import regulation, draw on criteria outlined in industrial sustainability initiatives, e.g. GFSI (Global Food Safety Initiative) and BSCI (Business Social Compliance Initiative), and work with various certifications available on the market. Generally, Swedish retailers require all suppliers to comply with minimum environmental and social requirements. Only when it comes to sourcing green products are there additional criteria specific to particular product categories, e.g. organic and Fair Trade.

Sustainability criteria vary for different product groups. For instance, all suppliers of conventional fresh produce at Axfood and ICA have to comply with the Global GAP standard (minimum standard of good agricultural practices), including contractors, subcontractors and primary producers. Swedish growers at Axfood and ICA are also required to comply with Svensk Sigill certification, whose sustainability criteria are sometimes more stringent than Global GAP regarding, for example, animal welfare and water usage. In the case of sourcing coffee, particular emphasis is placed on social provisions: *"how suppliers should treat workers at seven different stages of supply chain, from packaging houses in Sweden to farmers in Africa and South America".*[12]

Large coffee processors, however, have their own sustainability criteria outlined in the code of conduct, which food retailers have to accept. The agreement between food retailer and supplier still allows retail organisations to conduct the auditing procedures.

For particular segments of sustainable products, such as organic and ethical, third-party standards are used, such as KRAV, Fair Trade, and UTZ certified. Sometimes Swedish supermarkets ask for a combination of certification schemes. For instance, private eco-branded coffee at Coop, *Änglamark*, is double certified with both KRAV and Fair Trade standards, while Hemköp applied the same double certification to ecological bananas.

For producers of private brands, sustainability requirements are usually better specified by retailers, particularly if producers are located in developing countries, and additional sustainability requirements can be added. In some instances, these requirements are more stringent than those defined by existing third-party standards. For instance, the sustainability criteria for private eco-branded fresh fruits and vegetables, such as *Garant* (Axfood) and *Änglamark* (COOP), are based on organic KRAV standards. However, a number of additional sustainability requirements are also applied, such as lower levels of pesticide use, compliance with GFSI (Global Food Safety Initiative) for packaging units, and better packaging made out of recyclable materials.

[12] Östergren, R. (2012). Personal communication with Category Manager of Coffee at Coop. Conducted by O. Chkanikova, Lund, 12-1-2012.

Interviews revealed that lack or underdevelopment of standards and associated certification schemes has delayed sustainable sourcing initiatives. Axfood provided an example of sourcing farmed salmon from a large supplier in Norway:

> *"So far there is no MSC label developed for farmed fish – it has been developed only for fish caught in the wild. The only certification currently available is KRAV, but the volumes are not that high, as certification is costly and there is low uptake of KRAV-farmed salmon by consumers due to the price issue".*[13]

Axfood also stated that it is currently waiting for a new MSC label for farmed fish before increasing sourcing of more sustainable salmon that can be retailed at more affordable prices for consumers.

In an attempt to define sustainability criteria and elaborate on sustainable sourcing strategies, Swedish food retailers collaborate with NGOs such as the Swedish Society for Nature Conservation (Naturskyddsföreningen), WWF and Greenpeace, and join multi-industrial sustainability initiatives, such as the Roundtable on Sustainable Palm Oil (RSPO).

Store level

When asked how they define a sustainable product, respondents at store level often gave rather broad sweeping responses, such as *"a product that is produced with concern for the environment and the workers"*.[14] Answers varied greatly, but would often in some way refer to less harmful production methods (including references to organic farming and animal welfare), local production and seasonality. Less than half of the respondents made references to specific criteria, such as criteria for organic labels and Fair Trade, and very few engaged in a deeper discussion about how to judge sustainability of products. A number of interviewed store managers/owners raised questions about how to define 'locally produced' products. The general impression is that the understanding of the issues varies rather significantly. Approximately 30% of the interviewed store managers/owners expressed a vague and/or one-dimensional idea about what a sustainable product is. While some store managers/owners showed deep insight and interest in sustainability issues, the question of defining what is a green product is generally left to the central retail organisation.

3.2.2 Exercising positive influence over suppliers

Central retail organisation

Swedish food retailers employ different strategies to influence the supplier to provide sustainable products. These range from selecting/de-selecting suppliers based on price and quality parameters, and collaboration to motivate and support suppliers working towards higher levels of environmental and social performance.

When the supply of sustainable certified products is not perceived as constrained in any way (e.g. volume, price, quality and variety), food retailers typically base their purchasing decisions on product price and quality. In terms of influencing suppliers to develop more sustainable products and

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[13] Domeij, A. (2011). Personal communication with Head of Environmental and Social Responsibility at Axfood. Conducted by O. Chkanikova, Lund, 21-10-2011.

[14] Store manager. (2011). Personal communication with Store Manager at Coop. Conducted by M. Hagbjörk, Malmö.

operations, no positive incentives have been identified; measures are generally negative, including warnings about fines and delisting in case of non-compliance with sustainability requirements.

"When the supplier lost the Svensk Sigill certification, it was no longer allowed to deliver its products to the store".[15]

When non-compliance is revealed in an audit, the supplier is not delisted immediately. An open discussion is held with the supplier about why this has happened and how it can be prevented. The supplier is then usually given time to rectify the problem. Follow-up audits check whether the non-compliance problem has been resolved.

"*If the supplier makes no effort to improve, it may be delisted".*[16]

However, the majority of interviewed retailers stated that delisting exclusively on the basis of sustainability issues is rare; usually it is a combination of aspects regarding supplier performance, e.g. quality and delivery failures.

The amount of shelf space available was mentioned by a few respondents as leverage to motivate suppliers to provide organic products. For instance, the respondent from a discount food retailer acknowledged that shelf policies are more relaxed for organic products, i.e. eco-food is granted more space even if sales are low. This could be seen as another supermarket mechanism to utilise their power on the grounds of their possession of a critical commercial resource – shelf space.

To support sustainable production in terms of volume and range of supplied goods, some of the interviewed food retailers formulate joint business plans with farmers, including negotiation of production volumes, price and quality. Information in the form of training and implementation advice supports suppliers in launching green products. Often such collaborative practices are used for sourcing seasonal and national/local organic products. Other incentives include "*arranging campaigns in stores or organising advertisements as a way to encourage suppliers to produce for us in a certain way".*[17]

Swedish food retailers sometimes referred to a lack of power in influencing products and supplier performance, due to either concentration in the food processing industry or low procurement volumes. For instance, when sourcing Fair Trade coffee from a small number of large roasters, food retailers lack sufficient leverage to increase supply volumes. The respondent at ICA referred to some difficulties *"in making suppliers adjust to sustainability criteria when ICA is a 'small' customer",*[18] i.e. purchasing only a small proportion of the manufacturer's products.

When sourcing private brands, supermarkets mentioned greater responsibility for product and supplier sustainability performance.

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[15] Månsson, D. (2011). Personal communication with Category Manager of Fresh Fruits and Vegetables at Axfood. Conducted by O. Chkanikova, Lund, 2-11-2011.
[16] Domeij, A. (2011). Personal communication with Head of Environmental and Social Responsibility at Axfood. Conducted by O. Chkanikova, Lund, 21-10-2011.
[17] Nilsson, M. (2012). Personal communication with Category Manager of Fresh Fruits and Vegetables at Coop. Conducted by O. Chkanikova, Lund, 20-1-2012.
[18] Smith, M. (2011). Personal communication with Head of Environmental and Social responsibility at ICA. Conducted by O. Chkanikova, Lund, 28-2-2011.

"When it comes to actual sourcing, we are more picky about own-brand products, as we are more responsible for the products we put our label on".[19]

Food retailers view private eco-brands as a way to build brand image, gain customer confidence and provide cheaper alternatives of green products. In other words, private eco-branding increases competitive advantage and leads to higher profits from investments in greening product chains.

Compliance with sustainability criteria is sometimes described as a condition for supplying private-brand products. In other instances food retailers reported a higher degree of collaboration with private-brand suppliers regarding product sustainability:

"If we want to build a sustainable brand, we commit to long-term development of sustainability work with suppliers. There is a need to listen to suppliers, run the sustainability project together, understand what we have to do, and provide them with the necessary support".[20]

Generally, in sourcing private brands, food retailers reported "*getting more involved in the process of buying from raw material to shelf and influencing technical design and packaging specifications, as well as price".*[21]

Store level

In the study we found very few examples where store managers/owners actively seek to exert influence upstream in the supply chain, beyond traditional market transactions. However there is one example worth presenting that stood out from the rest of the sample.

The owner of this ICA store actively looks for and engages with local food producers. Describing himself as an entrepreneur, the storeowner actively seeks to identify local producers of high-quality food products and invites them to deliver to his store. Local fruit and vegetables is one area where the store works with several local suppliers. The store manager has also encouraged selected farmers to start their own processing. The expressed intention is to broaden the supply base for local products, such as locally-produced tomato ketchup, but also to encourage producers to capture a higher share of the value.

In addition to encouraging local farmers to venture into food production, the manager of this store also works with existing local producers of processed food. Here, it is interesting to note that some small-scale producers, who previously only delivered to high-end delicacy stores and restaurants, have multiplied their turnover by adding this one ICA store to their roster of customers. For meat products, the owner has established direct contracts with local farmers and a local butchery, completely bypassing the major meat producers in Sweden. He justifies this by saying he is able to

[19] Nilsson, H. (2011). Personal communication with Sourcing Manager of Coffee at Axfood. Conducted by O. Chkanikova, Lund, 29-9-2011.
[20] Dahlberg, A.-L. (2011). Personal communication with Head of Quality and Sustainability in Purchasing at Coop. Conducted by O. Chkanikova, Lund, 25-10-2011.
[21] Nilsson, H. (2011). Personal communication with Sourcing Manager of Coffee at Axfood. Conducted by O. Chkanikova, Lund, 29-9-2011.

"*get cuts of meat that meet consumer demand for quality and taste, rather than being adapted to optimise the production lines of large-scale meat producers*".[22]

While the owner of the store is very positive about the outcomes of his initiatives, he concedes that there are challenges. The emphasis on sourcing of local food increases the work load. Ordering from several small producers increases the number of shipments to the store, and makes it more challenging to schedule personnel to cope with incoming deliveries. While arguing that it is better for everyone if producers are paid enough to have a reasonable margin, he also noted that there is a price difference per unit, as compared to goods bought through ICA. However this storeowner maintains that by applying fixed sum mark-ups[23] rather than percentage mark-ups he is able to keep both consumer price and his own earnings at an acceptable level.

The example above shows that a difference can be made at store level. Local stores can play an important role by bringing more sustainable products to the end market, but also by actively seeking to stimulate local production and consumption of food. This may ultimately also have a positive impact on local job creation.

It is worth noting that the storeowner described in the example above is actively engaged in the work with the development of *Smaka på Skåne*, an organisation that works to facilitate the connection between local producers and local store owners and to help distinguish local produce in the stores through the *Smaka på Skåne* logo. His work with this organisation and his commitment to local products have generated invitations to speak at, for example, farmers conferences. This allowed him to gradually build a network and a reputation, so that producers now contact him rather than the other way round. When time is a scarce commodity, a platform where both producers and storeowners can meet and discuss ideas may be fundamental in stimulating local sourcing.

3.2.3 Exercising control over relevant aspects in the supply chain

Central retail organisation

It is clear that incorporating sustainability specifications in agreements with suppliers is not sufficient to ensure compliance with sustainability criteria. In order to monitor supplier compliance with sustainability requirements, food retailers conduct their own audits or use third-party verification schemes, or a combination of both.

Some of the food retailers have established a department within their central organisation for supplier monitoring and audits. Priority is given to auditing suppliers in high-risk countries, such as developing countries with a low level of enforcement of environmental and labour regulations.

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[22] Wieloch, M. (2012) Personal communication with ICA storeowner. Conducted by O. Chkanikova & B. Kogg, Lund, 28-3-2011.

[23] Traditionally, prices to consumers are determined by adding a percentage mark-up to the purchasing price per unit. If a conventional product costs 10 SEK and the margin applied is 40%, the store will make 4 SEK on each conventional product sold. If an organic version of the same product cost 15 SEK and the same 40% margin is applied the store will make 6 SEK for each product sold, and the difference in the price for the consumer will be 7 SEK. By applying a fixed sum mark up of say 4 SEK for a specific type of product, the store will make the same amount of money regardless of whether they sell a conventional or an organic product, but the consumer price will be lower, purchase price plus 4 SEK rather than 7 SEK.

Consequently, ICA has established regional sourcing offices in Asia, to be closer to suppliers and to conduct verification of compliance on-site.

When sourcing particular categories of green products, such as organic and Fair Trade, retailers work exclusively with third-party control agencies that verify compliance with organic and ethical standards, from cultivation to delivery of food to end-customer.

Generally, retailers perceived third-party verification as beneficial since it reduces corporate liability risks in cases of non-compliance, helps to build consumer confidence, and reduces costs of supplier audits. Where there is a lack or underdevelopment of quality assurance schemes, retailers might actively engage in setting up such schemes. For example, third-party audits have been developed by ICA to verify that the Swedish pork industry complies with animal welfare standards. Sometimes retailers devise mechanisms to reduce the auditing costs for suppliers; ICA for instance has developed the Cooperation with Svensk Sigill assurance scheme to reduce the costs of audits for small and local suppliers.

Besides auditing suppliers, retailers also need to trace products and ingredients back to plantations and ensure their segregation from other goods and additives. This type of control system can be provided by 'chain of custody'[24] certification embedded into services provided by third-party certification schemes, such as UTZ Certified.

Retailers pay greater attention to monitoring and verifying compliance in the case of private-brand producers. Along with third-party audits, internal audits are conducted with greater frequency to check processes and facilities of private-brand producers. When possible, food retailers try to shorten supply chains for their private-brand products to decrease complexity and to facilitate control of sustainability issues:

> *"For private-brand coffee, we work with a special supplier who receives our specifications, sources coffee directly from producers, and roasts/grades the beans here in Sweden".*[25]

Store level

Since most of the interviewed stores sourced the majority of their products through central sourcing organisations, compliance with basic regulatory requirements and any additional sustainability criteria is essentially left to the central sourcing organisation. Products sourced independently by the individual store were verified through inspection of relevant documentation. However, in a few cases where documentation was not available, store managers/owners mentioned that they would rely on their personal knowledge of the producer's operation (gained through site visits, etc.).

Independent stores that do not belong to any of the large retail chains clearly stated that eco-labels like KRAV and Fair Trade were considered absolutely essential for verification of compliance. These stores do not have the time or resources to assess compliance themselves, even though some stores made a few exceptions for small local producers with whom they had a close personal relationship,

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[24] 'Chain of custody' certification ensures that sustainable products/ingredients are not mixed with unsustainable products/ingredients at any stage in a supply chain.

[25] Östergren, R. (2012). Personal communication with Category Manager of Coffee at Coop. Conducted by O. Chkanikova, Lund, 12-1-2012.

and knew that the supplier applied ecological principles in production but could not afford certification.

3.3 Evaluation of retailers' upstream strategies

3.3.1 Central retail organisation

Swedish food retailers implement sustainable purchasing either via selection/de-selection of goods from the available certified product supply, or via collaborative practices with suppliers with the aim of adjusting supply characteristics to expectations of salient stakeholders. The salient stakeholders are consumers with their growing demand for green products, shareholders with their desire to generate higher profit margins by increasing the sales of sustainable goods, and NGO/media that address product-related sustainability issues.

Food retailer sourcing approaches depend on the characteristics of the procurement context, namely presence of established sustainability standards, perception of the availability of sustainably certified products, and the purchaser's attitude regarding their ability to exert influence over suppliers.

If the supply of sustainably certified products is not constrained (current supply characteristics satisfy stakeholder demands), the sustainable products are usually procured on the basis of price, quality and logistical convenience. Certification reduces corporate need to develop product sustainability specifications and to establish systems for control and verification of compliance. Product and/or supplier certification is demanded as a condition for conducting business. Interaction in a supply chain is usually limited to first-tier supplier and is based primarily on the review of relevant documentation, but the degree of coordination increases if products bear a private-brand logo. In this case, third-party verification is complemented by supplementary internal audits. In some cases, such as privately-branded coffee, verification of compliance is checked several tiers upstream.

When the supply of sustainable products is perceived as constrained, supermarkets can actively motivate and support suppliers to develop sustainable supply. Constrained supply is not only related to availability in terms of volume, but is also associated with price, quality and variety (range) of certified goods available. When faced with constrained supply,[26] some food retailers collaborate with suppliers to encourage them to obtain certification, increase sustainable production volumes, improve quality, and increase their range of sustainable products.

In Swedish food retailing, collaboration comprises communicating detailed specifications regarding product sustainability, training and implementation advice on how to achieve compliance, and development of joint business plans. Asset-specific investments[27] that were identified in sourcing organic dairy products under private-brand logo by the British supermarket Waitrose were not observed during interviews with Swedish supermarkets.

[26] Supply characteristics do not satisfy increasing consumer demand and/or shareholder's prospects regarding the level of 'green' sales and/or NGO expectations about product sustainability performance.
[27] Asset-specific investments include financial support to suppliers in their transition towards more sustainable production practices and guarantee of post-conversion contracts.

The power perspective provides additional insight into food retailers' efforts to green product chains. If food retailers perceive they have leverage over suppliers, often due to procurement volumes, supermarkets can influence upstream either through coercive measures, for example threats of fines or delisting, or through provision of positive incentives, such as development of joint business plans. On the contrary, if the supplier market is characterised by industrial concentration, as in the fish and coffee subsectors, or when the food retailer's purchasing volumes from the particular suppliers are low, interviewed Swedish supermarkets find it difficult to influence suppliers to acquire certification and/or improve product-related sustainability performance.

If stakeholder demand for sustainable products is increasing, but sustainability standards are underdeveloped and buyer-supplier relationships are unfavourable for collaboration (due to few large suppliers or low procurement volumes), the food retailer is placed in a critical situation. In this case, implementation of sustainable purchasing is particularly constrained. Supermarkets are then left with two options, namely to delay sustainable sourcing strategies until the standard is established or to support standard development by joining multi-industrial stakeholder initiatives, such as the Roundtable on Sustainable Palm Oil (RSPO).

Our research indicates that food retailers' efforts to green upstream practices and increase the proportion of sustainable products are closely connected with the development of private eco-brands. Empirical evidence shows that proactive supplier development strategies characterised by collaboration, provision of positive incentives and innovation in product sustainability standards (more stringent requirements defined by certification schemes) are more often applied to private eco-brands than to the rest of the product range.

Private branding provides food retailers with the economic rationale to engage with managing product sustainability issues. This is because it allows internalisation of investments made in green market development in the form of corporate image, brand value, customer loyalty, and retention. Furthermore, food retailers associate private property rights assigned to brands with increased legitimacy to demand product and supplier compliance with more stringent sustainability criteria.

The perceived liability risks, such as loss of competitive position and negative publicity in cases of non-compliance, increase the retailer's responsibility to ensure conformity of privately-branded products to sustainability requirements at different stages of production and distribution. To reduce these risks, food retailers increase the degree of interaction with relevant suppliers (sometimes several tiers upstream). Compliance is checked more often and third-party audits are supplemented with internal audits. Internal audits are conducted either by dedicated persons from a food retail organisation or by consultants.

3.3.2 Store level

In our original study design, the intention was to work closely with a limited number of storeowners to identify pathways for these stores to increase sourcing of sustainable products. However, after initial interviews, it became apparent that store owners/managers that are part of major retail chains do not perceive sourcing sustainable products as a challenge.

This is an important finding in itself, but also one that made it necessary to reshape our study. Instead of working closely with a small number of stores, we widened the scope to interview a larger sample of store owners and managers. We wanted to examine how they work with sourcing in everyday activities, and the relevant challenges and opportunities when discussing the individual store's role in promoting sustainable food production. The following themes emerged.

Demand as a constraining factor

Store managers/owners identified lack of demand from consumers as the key explanation for the limited range of sustainable products in stores. While several store managers see their range of sustainable products and their work with sustainability in general as relevant for consumers' general perception of the store, most of our respondents argue that lack of demand is a key challenge that needs to be addressed if they are to increase the range and volumes sold of sustainable products.

Does this mean that supply is unconstrained? Not necessarily, as owners/managers of independent stores that seek to offer exclusively green produce identify limited supply as a challenge. However, even here, their key frustration does not appear to be the lack of particular products, but rather the lack of wholesalers that carry a full range of organic produce, and who are willing to supply small volumes to independent stores.

We therefore decided to explore the proposition that the customer base of the individual store, or rather the perception of the store owner/manager about the stores' customer base (their demand and willingness to pay), is relevant to the work on sourcing and range of sustainable products.

Managers who have moved from one store to another show that the consumers' willingness to pay for sustainable products influences managers' work with these products. One store manager who moved from a larger city to a smaller city argued that demand was lower in the smaller city and so he could not work with sustainable products to the same extent as he did in his previous position. Another store manager moved between three different stores in the greater Stockholm area and argued that green products can be easily sold in the more affluent suburbs of Täby and Södermalm, but not in Upplandsväsby, where the store's customer base was generally less well off.

Other demographic factors mentioned were origin (one store manager in Malmö claimed that consumers with a non-Swedish background were less inclined to ask for local products, as they have less of a connection with the local region) and age (one store manager mentioned difficulties in convincing people of upper middle-age that sustainability is a relevant concept).

It is however interesting to note that two of the store owners interviewed who worked most actively with sourcing sustainable and locally produced products owned stores with a very mixed customer base, with many consumers coming from areas with low average incomes and mixed ethnicity. These stores had a strong emphasis on local and green products, alongside focused product ranges such as 'multi-cultural products'. One of these storeowners argued that many of his colleagues underestimate the customer: *"clients with low incomes also want high-quality food".*[28]

Personal interests and skills matter

By interviewing managers/owners of stores of different size and affiliation, we have sought to explore how factors related to the nature of ownership influence the work on sustainable products. Our data provide no clear indication that one type of ownership structure is more favourable for sourcing of sustainable products than another. All retail chains offer highly standardised supply services to individual stores with basic product ranges and automatic orders to keep stocks at desired levels. There is some difference between ICA and Coop stores in terms of the freedom that

[28] Wieloch, M. (2012) Personal communication with ICA storeowner. Conducted by O. Chkanikova & B. Kogg, Lund, 28-3-2011.

individual store owners/managers have when it comes to sourcing from suppliers outside the retail chain's central sourcing organisation. Nevertheless, stores with exceptional focus on sustainable products were found both within Coop and ICA.

The findings indicate that the personal interests and beliefs of the store manager/owner are important in this context. While recognising the ultimate importance of customer demand, managers with a personal interest in sustainability or local production seemed to have a more positive perception about consumer interests and preferences for these types of products. They also demonstrated some ingenuity in overcoming barriers to increased demand, such as by sourcing directly from the producer to cut out the cost of the middle man and by calculating prices based on fixed sum mark-ups rather than percentage mark-ups.

Since store owners/managers get direct feedback every day about customer preferences through recording volume of sales, it is logical to assume that they know their customer base very well. Still it may be worth asking to what extent store owners'/managers' perception about their customer base is filtered through their own interests and ideals. The owners/managers that claimed a personal interest in the environment also seemed to have a more positive expectation of customer demand for sustainable products. It is also notable that within the same small area of Stockholm we found one store manager who had not perceived any consumer interest in locally produced products, whereas another store manager, operating in the same area, reported that demand for, and sales of, locally produced products had increased over the previous two years.

The impact of the supply base

Managers/owners of conventional grocery stores generally did not perceive supply of sustainable products as a constraining factor. Most respondents were happy with the range of green products available to them via their central sourcing organisations, but a few interviewees mentioned that local products were less readily available. Here we did see early indications that networks, such as *Smaka på Skåne*, an organisation that actively works to put local producers and local retailers in the county of Skåne in touch with each other, have made an impact on product ranges in stores. By making local products more easily accessible and by providing means for differentiating these products in the store, more local produce has appeared in the participating stores. This initiative is still in an early stage, and it is worth analysing its continued development and impact.

3.4 Lessons learned

The results of the study indicate that the food retailer's engagement in managing product sustainability issues that arise upstream in the supply chain is limited by the specific nature of the procurement context. This context is not always conducive to the food retailer's ability to successfully influence product and supplier sustainability performance. The gap between the rhetoric and reality of corporate efforts to green product chains is explained by a number of constraints as perceived by the interviewed practitioners, both at central retail organisation and store level.

1. ***Higher production costs of sustainable products.*** For some sustainable products, such as organic potatoes and carrots, production costs are higher than for conventional alternatives, and the challenge to increase sustainable procurement volumes lies not in influencing supply, but rather demand. For instance, Axfood commented:

"We can source more sustainable alternatives; the problem is poor consumer uptake of organic and Fair Trade fruits and vegetables due to the price issue".[29]

Food retailers have developed various strategies to influence demand for sustainable goods. Some private eco-branded products can be produced and retailed at prices that are lower than other green products:

"Consumers want green products at attractive prices and our private eco-branded range helps meet that demand".[30]

Retailers mentioned price adjustment strategies to make consumers choose sustainable alternatives:

"*There is an actual price* [to produce sustainable products] *and the price that encourages consumers to buy the product. So sometimes we reduce the price of sustainable products or increase the price of conventional products to reduce the relative price of sustainable products".*[31]

Double-certification is viewed as another strategy to boost sustainable consumption. In order to increase the sales of Fair Trade bananas, which are more expensive than organic bananas, Axfood decided to "*… no longer offer two different categories, i.e. organic and Fair Trade, separately; the sustainable bananas need to be double-certified as organic and Fair Trade. So, if consumers want to buy organic bananas, they also have to go for the* [more expensive] *Fair Trade".*[32]

2. ***Low production volumes.*** Another challenge to green procurement lies in low production volumes of sustainable products. Axfood commented for example:

"There are not enough Fair Trade coffee beans in the world, i.e. actual raw material, and this could be a challenge to increasing the proportion of more sustainable coffee".[33]

Some food retailers also mentioned the low production volumes and difficulty in finding organic strawberries, champignons and kiwi.

One of the respondents attributed the limited volumes of sustainable products, e.g. Fair Trade coffee, to the failure of certification institutions:

"I think there is sufficient supply because 40-60% of the coffee produced according to the Fair Trade standards is actually sold as conventional coffee. The certification institutions are the ones who fail; it is problematic for the farmers to get their products

[29] Månsson, D. (2011). Personal communication with Category Manager of Fresh Fruits and Vegetables at Axfood. Conducted by O. Chkanikova, Lund, 2-11-2011.
[30] Smith, M. (2011). Personal communication with Head of Environmental and Social Responsibility at ICA. Conducted by O. Chkanikova, Lund, 28-2-2011.
[31] Dahlberg, A.-L. (2011). Personal communication with Head of Quality and Sustainability in Purchasing at Coop. Conducted by O. Chkanikova, Lund, 25-10-2011.
[32] Månsson, D. (2011). Personal communication with Category Manager of Fresh Fruits and Vegetables at Axfood. Conducted by O. Chkanikova, Lund, 2-11-2011.
[33] Nilsson, H. (2011). Personal communication with Sourcing Manager of Coffee at Axfood. Conducted by O. Chkanikova, Lund, 29-9-2011.

certified and it is easier for them to sell it as conventional coffee at coffee auctions, although in reality it is a Fair Trade product".[34]

This indicates the problems associated with costs of certification for farmers and/or access to certification institutions, which can be underrepresented in developing countries.

3. ***Lack of power over suppliers.*** In Sweden the market power of food retailers, and therefore their ability to exercise influence over suppliers of particular product categories, is counterbalanced by the concentration trend in the food processing industry, such as in the coffee and fish subsectors. Low procurement volumes of certain goods also imply limited food retailer ability to influence suppliers into adjusting their products and processes to sustainability criteria outlined in the retailer's code of conduct.

4. ***Lack or underdevelopment of standards and associated certification schemes.*** Lack or underdevelopment of standards might prevent retailer engagement with sustainable sourcing, especially if coupled with a perceived lack of power to exert unilateral influence over suppliers. The importance of standards has been particularly demonstrated with regard to farmed salmon and palm oil: power structures in supply chains, an institutional gap in terms of lack of well-established certification schemes, along with lack of the resources and expertise needed to develop and implement private standards, thwart the individual food retailer's efforts to green product chains.

The study has shown that certification schemes remove or reduce corporate needs to adjust sourcing practices when buying sustainable products, thereby reducing transaction costs associated with greening product chains. In addition, certification schemes are of particular importance in helping food retailers achieve internal legitimacy, i.e. acceptance and compliance of upstream supply chain players. This is particularly true if relative dependency between suppliers and food retailers is not conducive to the food retailer's ability to exert influence over product and supplier sustainability performance.

5. ***Lack of variety/limited range of sustainable products*****.** Some food retailers mentioned the lack of variety, the limited range, of sustainable goods, as a barrier to sustainable sourcing.

"The problem with vegetables is not the number of local organic suppliers; instead, too many farmers produce the same things, basically carrots, onions, potatoes. But we look also for other products that might be difficult to produce organically, e.g. strawberries, melons and champignons".[35]

Among the reasons for the limited variety of organic products is that farmers lack information about how to produce organic products.

6. ***Inadequate quality of sustainable products***. Another challenge in sourcing sustainable products is inadequate quality:

[34] Östergren, R. (2012). Personal communication with Category Manager of Coffee at Coop. Conducted by O. Chkanikova, Lund, 12-1-2012.

[35] Haubjerg, S. (2011). Personal communication with Category Manager of Fresh Fruits and Vegetables at IRMA. Conducted by O. Chkanikova, Lund, 2-12-2011.

"Shelf-life is a problem to some extent, i.e. how long the product can stay on the shelf before it goes bad. For instance, organic products rot faster and are usually more sensitive to external damage, such as during transport".[36]

7. ***Combination of price, volume, quality and logistics issues***. Interviewed food retailers mentioned that another challenge to sustainable sourcing is finding suppliers who produce sufficient volumes of products at a good price and quality. Having suppliers that provide both sustainable and conventional products has been highlighted by retailers as advantageous in terms of logistics:

"It is more efficient to have combined deliveries, as the volume of sustainable produce is not that high".[37]

*8. **Path-dependency of retail-supplier relationships.*** The tradition of established business relationships can delay implementation of sustainable sourcing initiatives. For instance, Coop reported that it took approximately 10 years to fulfil the commitment of sourcing only free-range eggs:

"We have responsibility to producers with whom we have worked for a long time. They are good and reliable producers, delivering high-quality goods. We cannot just drop them because they cannot immediately provide the desired sustainable products".[38]

9. ***Difficulties arising from international sourcing.*** Some food retailers highlighted the difficulty in sourcing products from developing countries due to less stringent environmental and labour legislation; local legislation must then be compared with EU regulations:

"In order to make the buying process easier, there should be alignment/harmonisation of regulatory requirements in all countries. This in turn would affect the consumers' trust in sustainable products. Products sourced from Sweden cannot have stricter sustainability requirements than those sourced from developing countries".[39]

3.5 Recommendations

These challenges associated with sustainable sourcing in food retailing have important implications for policy-makers. The following set of recommendations is directed towards policy-makers, practitioners in central retail organisations and stores, and researchers.

Recommendations for policy makers

Demand facilitation. When the supply of sustainable products is not constrained, strategies that enable retailers to increase the sourcing of sustainable products, and thereby increase the proportion of sustainable products, should aim to increase consumer demand. Interviewed food

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[36] Månsson, D. (2011). Personal communication with Category Manager of Fresh Fruits and Vegetables at Axfood. Conducted by O. Chkanikova, Lund, 2-11-2011.
[37] Månsson, D. (2011). Personal communication with Category Manager of Fresh Fruits and Vegetables at Axfood. Conducted by O. Chkanikova, Lund, 2-11-2011.
[38] Robertsson, M. (2011). Personal communication with Head of Sustainability at Coop. Conducted by O. Chkanikova, Lund, 3-3-2011.
[39] Luedtkes, P. (2012). Personal communication with CSR/Environmental Coordinator at Everfresh AB, which fulfills the category management function for fruits and vegetables at Coop. Conducted by O. Chkanikova, Lund, 20-1-2012.

retailers highlighted a lack of governmental intervention to reduce prices for sustainable products and to develop sustainable food diet recommendations. Reducing the price difference between sustainable and conventional products would boost green sales, and thereby generate business justification for food retailers to engage with sustainable sourcing practices.[40]

With regard to developing sustainable diet recommendations, it is worth noting that a recent initiative by the Swedish Food Authority to develop consumer guidance for "eco-smart food choices" (Naturskyddsforeningen 2011) has been cancelled by the EU Commission, which found signs of protectionism in favouring local food suppliers. This indicates that governmental engagement in facilitating green consumer behaviour might not be easy in the very controversial political terrain, with additional policy changes needed to reconcile the divergence of interests between product sustainability policy and free trade provisions.

Supply facilitation. Where procurement of sustainable products is problematic due to constrained supply, policy-makers can provide incentives for suppliers to acquire certification, increase production volumes and product ranges, and improve the quality of sustainable products. Examples of incentives are information support (e.g. detailed production protocols on how to produce certain sustainable items), advice and training, and financial assistance (e.g. subsidies) for adaptation of production methods.

When constrained supply is attributed to high prices of certification for individual farmers and lack of independent certifiers in developing countries, the avenues for action include attracting donor investments to institutional capacity building and offering solutions to decrease certification costs, such as by providing opportunities for group vs. individual farmer certification.

In order to improve conditions for sustainable production, national governments and international bodies can establish 'Action Plans' with clear visions and well-defined actors' responsibilities, and facilitate dialogue between multiple international stakeholders. An attempt to bring about the latter is the recent UNDP 'Green Commodity Facility', which aims to "*incentivize and enable countries to institutionalize sustainable standards, service delivery systems and policies required for long-term, mainstream and sustainable commodity production"* (UNDP 2009).

Establishment of certification bodies and provision of complementary services. Setting up certification bodies has positive implications for facilitating food retailer engagement with sustainable sourcing. Our findings reveal that certification schemes reduce the retailer's need to develop its own sophisticated sourcing and supply chain management practices. Instead, the resource-intensive task of delimiting sustainability criteria, selecting suppliers and developing systems for monitoring compliance can be outsourced to independent standard-setting organisations and certifiers.

Provision of complementary services, such as information databases that rank products and suppliers according to levels of sustainability performance, can further improve cost-efficiency of greening product chains by food retailers. A number of measures have been already initiated by

[40] In this report we are not able to provide recommendations regarding the appropriateness of specific economic policy instruments. Discussions regarding differential VAT to promote changes in consumption and production has been on the political agenda for many years now, and a range of official evaluations have been made both in Sweden and at EU level, and motions to implement such measures in Sweden have been rejected (Motion 2009/10:Sk484).

policy makers along these lines, such as the International Reference Life Cycle Data system (although data on food products and their sustainability impact are still incomplete).

Measures to facilitate sustainable sourcing at store level. Measures taken to motivate and facilitate sustainable sourcing at central retail organisation level will have a large impact on the product range in individual stores, since much of the product range in stores is defined centrally. This is irrespective of the ownership structure of the food retailers interviewed. However, measures designed to stimulate action at store level are also important, partly because this will put additional pressure on central purchasing units, but also because stores may have a positive impact on local production and consumption. Measures that serve to connect local producers with stores appear to be an interesting avenue of action and the outcome of relatively new initiatives such as *Smaka på Skåne* should be monitored and analysed.

Recommendations for retailers

Consideration of the purchasing context when implementing sustainable sourcing. Our study suggests that successful implementation of sustainable sourcing, while retaining profitability and competitive advantage, requires procurement approaches that account for a number of characteristics in the purchasing context. Relative dependency between players in procurement channels, trends in development of standards, and changes in supply of and demand for sustainable products should be assessed by practitioners dealing with development and implementation of strategies for greening supply chains. For instance, if sustainable supply is constrained in terms of volumes, prices, quality or diversity of sustainable products, food retailers might consider collaboration with suppliers to motivate and support production of sustainable products.

However, if sustainably certified products are widely available on the supplier market at relatively competitive prices, strategic partnerships with suppliers might incur higher transaction costs and thereby undermine business efficiency. In situations where sustainable standards are underdeveloped and/or buyer-supplier relationships are unfavourable for collaboration (due to few large suppliers or low procurement volumes), retailers should consider the pros and cons of engaging with unilateral vs. multi-stakeholder approaches to greening supply chain.

Stimulating consumer demand for sustainable products. To create the business case for increasing the proportion of procured green products, food retailers can actively engage with facilitation of sustainable consumption. This can be done through green marketing initiatives (promotion and advertisement campaigns), reducing prices of sustainable products, choice editing (removal of unsustainable products from the range), or applying multiple certifications to products with the aim of increasing consumer trust in sustainability claims.

However, there is concern among food retailers that promoting green products would put conventional products at a comparative disadvantage, potentially reducing profit margins. Application of choice editing to a wider range of product categories is also associated with weakened competitive position on the market, especially when other grocery stores continue to offer unsustainable products in their range. Our interviews showed that food retailers do not reduce price of all sustainable products; for example, Coop mostly subsidises organic products.

Development of private eco-branded assortment. Private eco-branding provides food retailers with additional incentives to engage with greening supply chains, since associated investments can be internalised in the form of brand image, customer loyalty and retention. In addition, privately eco-branded products can sometimes be procured and/or retailed at prices lower than other eco-labelled products, which increases green sales and/or generates higher profit margins.

Ownership of procured products might allow food retailers to overcome unfavourable power circumstances, increasing their degree of influence over sustainability performance of supplied products. Existing certification schemes are used to create consumer trust in private eco-branded products. For instance, 'Änglamark' (Coop) and 'I Love Eco' (ICA) brands carry KRAV or EU ecological certification. Some of these private eco-branded products, such as coffee, are even double-certified by KRAV/EU and Fair-Trade/UTZ certified standards.

Shelf policies for green products. Food retailers can exercise further leverage over product and supplier sustainability performance by adjusting their shelf policies for green products. So far, such practices are rare, according to the supermarkets interviewed. Better shelf placement or prolongation of shelf life for green products (even if they are not sold quick enough) can be used as an incentive to suppliers to provide products that are better from a sustainability perspective. However, for some products, such as organic fresh produce, prolongation of shelf life is problematic since these products ripen and deteriorate quicker.

Collaboration between retailers on sustainability in supply chain. Swedish food retailers have yet to realise the advantages of collaboration in sustainable sourcing activities. Instead, collaboration with other retailers on sourcing issues is often perceived as a threat to competitive advantage. At the same time, the creation of a common forum for discussion would help unify sustainable sourcing requirements and overcome unfavourable power conditions, and motivate suppliers to green their products and operations. Furthermore, collaborative retail lobbying of the sustainability agenda in political forums might help to overcome the conflict of interest between sustainability and political goals.

Recommendation for researchers

Future research should focus on the roles of various players, socio-technological innovations, and the multifaceted process of transition towards sustainable food supply chains. Although food retailers are often perceived as powerful players capable of successfully greening supply chains, the results of this study demonstrate that supermarkets are not always capable to deliver the sustainability improvements demanded by stakeholders. At the same time, without the involvement of the food retailing sector, the required transformation would not be achieved at the level of global food systems.

Future research should evaluate the roles of various players and social-technological innovation, including their co-evolutionary development, in enabling food retailers to overcome existing barriers and challenges associated with sustainable sourcing. Specific attention should be paid to the role of standardisation and certification institutions in facilitating retailer engagement with sustainable sourcing and supply chain management.

4 In-house activities of Swedish retailers to promote sustainability

This chapter summarises what we have learned about the in-store innovation process and how it relates to organisational structure. In the introduction, we explain what we considered as innovation. We then justify why in-store eco-innovations are important and why there is a need to study the organisational structure in relation to the innovation process. We present a five-step framework for exploring innovation processes, selected from research literature. This is followed by presentations of organisational structures and innovation processes in two Swedish retail chains – ICA Group and Coop. The innovation processes are evaluated in relation to the chosen framework and the lessons learned are presented. The chapter concludes with recommendations for policy-makers, food retailers and researchers on how to better facilitate a more effective innovation process.

4.1 Introduction

In everyday language, the words 'invention' and 'innovation' are often used interchangeably, resulting in ambiguity about the actual meaning of an (eco-)innovation. Innovation can mean anything from an invention to incremental improvement. According to Wikipedia, the difference is that "innovation' refers to the use of a better and, as a result, novel idea or method, while 'invention' refers more directly to the creation of the idea or method itself. In turn 'innovation' differs from 'improvement' in that it implies the notion of doing something differently rather than doing the same thing better.

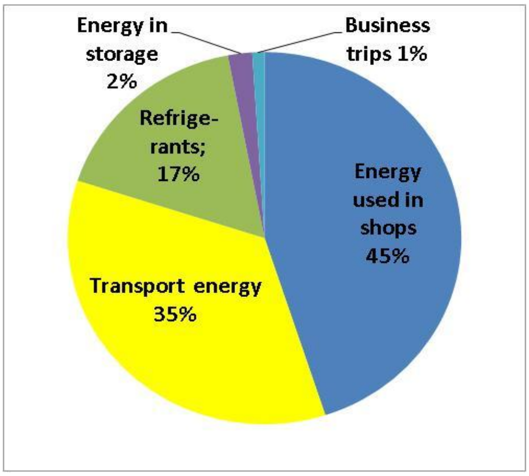
In reality, however, distinguishing between innovation and improvement (e.g. routine modernisation using off-the-shelf solutions) is not straightforward. In our research into the in-store innovation process, we encountered a difficulty in explaining the difference to our interviewees, and decided not to differentiate between an innovation and an improvement. Therefore, we regarded any improvement, regardless of whether it is about doing the same thing better or doing something differently, as innovation. We regarded in-store eco-innovations as any change (product, process or idea) in retail facilities that saves resources or reduces waste, thereby cutting costs and giving a competitive advantage. This implied that, in our interviews with store representatives, we primarily asked them questions relating to cost savings rather than asking about any eco-innovations. This allowed us to avoid the ambiguity of definitions and relate the interviews more to the daily agendas of our interviewees.

4.1.1 Why in-store activities are important

The environmental impact associated with in-store operations in the food retail sector originates from waste generation and resource use for transportation, temperature control, lighting, ventilation, cleaning, cooking and other auxiliary activities. Examples of main resource inputs include electricity, district heating, packaging, water, and various cleaning agents. The main waste sources are expired food items and secondary packaging.

In-store retail activities are responsible for much of the environmental footprint. For example, the Swedish retail chain ICA Group reported that its in-store operations and logistics are responsible for the largest share of carbon dioxide emissions, largely through energy consumption (Figure 2) (ICA 2013).

Competition, economic drivers and pressures from consumers and investors trigger the retail sector to focus on sustainable practices within their organisations, including the reduction of environmental impacts from in-store activities. Many environmental improvements could be and are being made in food retail stores in Europe, ranging from *hardware-related improvements* (e.g. monitoring and optimising energy consumption by in-store appliances, installing energy-efficient hardware for cooling/freezing, lighting, heating and ventilation) to *improvements in process and operations* (e.g. reducing water consumption and improving waste management) including the *implementation of environmental management systems* (Danish Ministry of the Environment and Danish EPA 2010; Schaffers et al. 2011; Tassou et al. 2011). Environmental impacts can also be reduced by *greening the design of buildings* for higher energy efficiency.



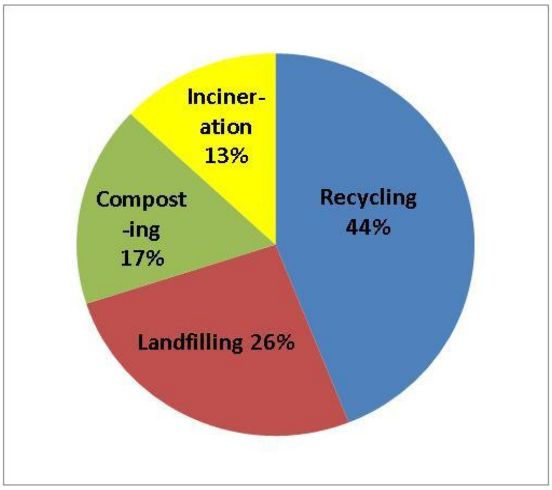


Figure 2. ICA's CO_2 emissions by source (total 302 k-ton) and treatment of solid waste; total 73 k-ton in 2012.

Source: (ICA 2013).

Swedish retailers are also working hard to green their businesses, employing many strategies and targeting various sustainability aspects along the entire retail value chains. Improving in-store operations is one of the top priority areas. According to the ICA Group Sustainability Report 2012, the following strategies have been employed within the group (ICA 2013):

- Introduction of obligatory web-based environmental training for ICA staff;
- Stricter rules for waste management and energy efficiency, including 'Green Building' certifications (e.g. *ICA Kvantum Sannegården* was awarded this certificate for its 25% reduction of energy use compared to the prevailing building codes);
- Clear focus on reducing energy consumption in large appliances, e.g. installation of lids and doors on refrigerators and freezers, compartmentalising cooling/freezing spaces, use of natural refrigerants, recovery and use of heat from cooling/freezing equipment to heat the facilities;
- Better temperature control and automation of lighting (e.g. up to 50% less energy for lighting and 10-15% energy reduction in a number of *Rimi Baltic's Lithuania* stores);
- Charging stations for customers' electric vehicles (e.g. at the end of 2012 charging stations were installed at 11 ICA stores);
- Wider use of renewable electricity contracts through central agreements with energy companies (e.g. about 20% of ICA's Swedish stores were using renewable electricity via the central agreement at year-end 2012).

ICA has also implemented its flagship store strategy – building the most eco-friendly showcase stores to test various environmental improvements and to inspire other member organisations in the group. In 2014, ICA's greenest project – the new *Barkarbystaden* shopping centre in Järfälla – will be completed. It will feature green spaces and construction methods that meet the criteria of the Swedish Green Building Council, with emphasis on energy, indoor environments and materials. The design includes LED-lit parking, green electricity and other innovative solutions for energy consumption and waste management.

Other large Swedish food retailers are also implementing green measures. Coop managed to reduce its store-related GHG emissions by 52% between 2008 and 2012, primarily focusing on improving energy efficiency of cooling equipment (reducing the amount of refrigerants, installing LED lighting in the refrigerators, modifying doors and lids of refrigerators), and increasing the use of renewable energy sources. The largest source of Coop's GHG emissions is transport, responsible for 66% of the total climate-related emissions. By improving logistics and working with transport companies, Coop has managed to improve transport-related energy efficiency; in 2012, the number of transports increased by 12%, but GHG emissions increased only by 2% (COOP 2012). Coop is also implementing the flagship store strategy; *Coop Extra Mjölby* and *Coop Konsum Folkparken* in Södertälje won special gold awards for using 50% less energy in their buildings compared to the Swedish building code requirements (COOP 2012).

4.1.2 Why studying innovation process is important

The capacity to introduce eco-innovations varies from sector to sector, and the retail sector is no exception. A 2011 study by the European Commission rated the generic level of 'innovativeness' in the retail sector[41] and found out that, although the whole retail sector represents an economically important activity (retail trade accounts for 13% and wholesale trade accounts for 16% of the value added of the EU service sector), the proportion of innovative firms is 24% less than in the overall economy and 31% less compared to the manufacturing sector (Schaffers et al. 2011). Expenditure on innovation as a proportion of sales is 35% lower than the figure for the entire economy. Investment in research, development and innovation is also relatively small compared with other sectors, particularly in terms of intra-mural R&D (Schaffers et al. 2011).

That study also found that innovation in the wholesale trade sector seems to be more common than in the retail trade (Schaffers et al. 2011). According to Desouza (2009), the level of innovation success and the types of innovation that actually reach implementation are largely determined by the effectiveness of the innovation process. This justifies the relevance of studying the process of innovation in the food retail sector in order to improve understanding of the important factors influencing the effectiveness of eco-innovations.

A 2011 study on innovation in the retail sector found that, geographically, Southern Europe is more active in introducing innovations than companies in Northern and Eastern Europe. This might be explained by higher population densities and tougher competition (Schaffers et al. 2011).

A serious barrier to innovation could be a lack of skills or under-qualified employees. For example, in the Swedish wholesale and retail sector, only 35% of the employees are university graduates (Reynolds and Hristov 2009). Another barrier could be lack of a structured and productive approach

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[41] According to the EU NACE Rev 1.1 classification, the retail sector consists of wholesale trade (NACE 51) and retail trade (NACE 51) sectors.

to manage the emergence of innovative ideas and further the implementation of the innovation (Jónsdóttir 2012). Research by Chang and Harrington (1998) and Kasper, Mühlbacher et al. (2008) confirm that the emergence of innovation depends on the above mentioned factors – namely the level of competition, the structure of the company, and how the process of innovation is organised.

Within the retail trade sector, there seems to be a general lack of research on how in-store changes actually occur in practice, in particular how the innovation process, e.g. its structure, influences the uptake of eco-innovations (Jónsdóttir 2012). Where there is a lack of structure (manuals, plans, standard practices, procedures, etc.), innovations are commonly seen as something that 'just happen' by themselves (Desouza et al. 2009). To gain a better understanding of how the innovation process functions at store level, and how innovations could be better managed, the organisational structure of the business needs to be considered (Tidd et al. 2001).

This chapter will therefore focus on how the structure of an organisation influences the in-store innovation process and the uptake and implementation of eco-innovations.

4.2 The in-store innovation process in retail

4.2.1 Framework of innovation process

A company's success in terms of innovative activities can be attributed to characteristics of its innovation processes. A useful framework to structure the understanding of the innovation process was suggested by Desouza, Dombrowski et al. (2009), who distinguished five common steps in the innovation process: (1) generation and mobilisation, (2) advocacy and screening, (3) experimentation, (4) commercialisation, and (5) diffusion and implementation (see Figure 3). This framework is theoretical and, in reality, companies do not necessarily have to manage and execute all of the five steps or do it all by themselves. For instance parts of the process can be outsourced, or companies can work in cooperation with stakeholders such as customers, business associates and suppliers (Desouza et al. 2009). Nevertheless this framework is worth using when exploring innovation processes.

In the first step of the innovation process, *ideas are generated* to address a particular need. This is followed by *mobilisation,* in which the idea is physically or logically moved to a place where it can actually stimulate innovation.

The *advocacy and screening* step involves the evaluation and refining of the generated ideas. This step is vital in developing new products and adopting new practices. A well-defined practice of this particular step indicates a strong innovation process in the organisation (Desouza et al. 2009).

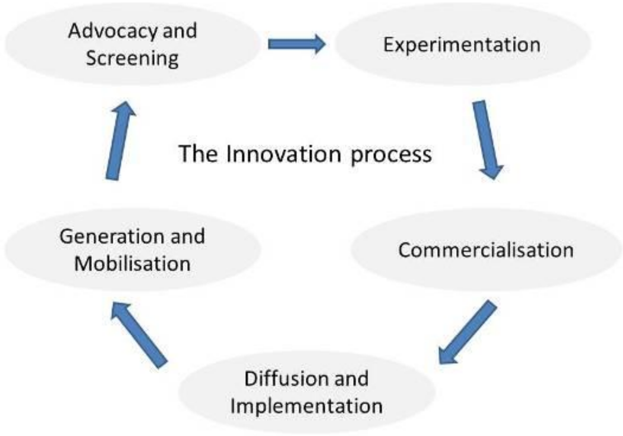

Figure 3. Framework for the innovation process.

Source: adapted from Desouza, Dombrowski et al. (2009).

In the *experimentation* step, the process is quite unstructured since each idea is unique and a single method cannot be applied to all generated ideas. In this step the ideas that are thought to be quite improbable at that time are filtered out and possibly stored for later use. The remaining ideas are then tested either on a small scale or using various safeguards to reduce the risk of failure and damage to the organisation. If the idea proves successful, it enters the *commercialisation* step where it is marketed to establish an acceptance of the innovation both within and outside the organisation. Acceptance within the organisation is especially important to secure support and resources for mainstreaming the idea.

The last step is *diffusion and implementation*. If the innovation is to be fully implemented, it is vital that the organisation has adequate resources in terms of time, finance, methods and materials. To ensure that the innovation is a success, it is also vital that the organisation is capable of abandoning the behaviour and/or processes that the new innovation is replacing (Desouza et al. 2009).

4.2.2 Organisational structure as a parameter for innovation

Literature on organisational innovation suggests that organisational structure is a very important parameter in the innovation process (Damanpour and Gopalakrishnan 1998; De Jong et al. 2003; Nahm et al. 2003). According to Chang and Harrington (1998), the efficiency at which innovations at central organisational level trickle down to lower levels of organisation is influenced mainly by the organisational structure. The structure defines the work roles, allocates responsibilities, decides on the flow of information and decisions, and the connection between different levels (from central to peripheral) within the organisation (Gonzales 2007; Kortmann 2012).

The realm of organisational structures is diverse and complex, but, for the purpose of our study on innovation process, we will provide a simplified view.

In centralised organisational structures, it is common that senior management at central corporate level has the decision-making power. There are many different types of centralisation so in reality there are many different varieties of decision-making schemes, but a common feature of all of them is a hierarchical distribution of power.

The other extreme is decentralisation, where the hierarchical structures are much less prevalent and decision-making is more widespread. Decentralised organisations may still retain a power centre whose role is to provide strategic direction and a general policy framework, but the operational execution is carried out by lower level structures with substantial decision-making power. Decentralised organisations could be a set of franchises where the franchise owners have a large degree of independence compared to store managers in centralised organisations.

Figure 4 illustrates the differences between the centralised and decentralised organisations. Decision-making in centralised organisations flows from the top down, whereas it is more evenly distributed in the decentralised organisation.

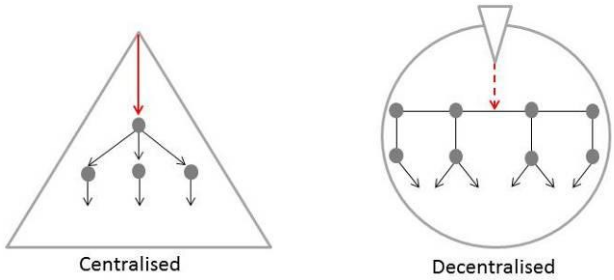

Figure 4. Centralised vs. decentralised organisations: distribution of decision-making within the organisation.

Source: (Jónsdóttir 2012).

Centralisation of power is often viewed as an efficient process for specialisation and streamlining decision-making. Centralised organisations have vertical power structures with clearly-defined subordinate levels and areas of responsibility. This may make decision-making and execution more efficient. However, there is a risk that a centralised structure may inhibit the employees' creativity, the ability to take initiative, and hinder vertical two-way communication. Centralised organisations may also become bureaucratic and inflexible, and thereby more rigid and vulnerable to external changes (Jónsdóttir 2012; Kortmann 2012).

A decentralised organisation has a more broadly distributed power structure, where non-managerial personnel have more opportunities to present their views and ideas and to take part in decision-making (Kortmann 2012). Decentralised organisational structures are thought to be more positive for the innovation process than centralised structures (Damanpour and Gopalakrishnan 1998; De Jong et al. 2003; Nahm et al. 2003).

In theory, decentralisation enables richer communication both vertically and horizontally, and the communication is not subject to delay as it is better connected to the environment in which it operates (Chang and Harrington 1998; Nahm et al. 2003). According to OECD & European Commission (2005), decentralised organisation structures are also thought to encourage more radical innovation than centralised structures. Decentralised structures are also more suitable for innovative persons to exploit the potential of their creativity (Chang and Harrington 1998).

In the following sections we analyse two cases of food retailers, Coop and ICA, in order to test the hypothesis that organisational structure might influence innovation.

4.3 Innovation processes in Swedish retail

ICA Group is by far the largest food retailer in Sweden, covering about half of the market. The second largest retailer is the *Coop Group*, taking about 22% of the market. These two retail organisations were chosen as case studies, not only because they are the two largest retailers on the Swedish market but also because they represent two different organisational structures (Jónsdóttir 2012). ICA's management was taken as a model representing a decentralised structure and Coop's management as a model of centralisation.

This section shows the results of our empirical studies[42] on organisational structures and innovation processes in these two companies.

4.3.1 Description of case study companies

The *ICA Group* is owned by *Royal Ahold* and *Hakon Invest AB N.V.* The Association of ICA Retailers (*ICA-handlarnas Förbund*) owns nearly 70% of AB Hakon Invest and the remaining 30% is in private ownership. The model of independent retailers (franchise) is used to run ICA stores in Sweden, so retail outlets are owned and operated by individual store owners working under agreement with ICA Group.

Figure 5 illustrates the organisational structure of ICA. The Director of Formats is responsible for matters relating to the activities of the four types of ICA stores (see below). Several directors are responsible for central level management of areas such as ICA brand-related marketing, business development, procurement sorting and logistics, establishment, and finance. Generally, these are the areas where the corporate structures exercise their decision-making power and provide support to the individual store level. The latter is fully turn responsible for the operational side and retail where it has full decision-making power.

A more detailed description and chart concerning the organisational structure of the ICA Group can be found in the ICA annual report, available on the company website.[43]

The ICA brand is represented in four store formats: the hypermarket *ICA Maxi Stormarknad* – a very large-scale food retail store selling also non-food related items; the supermarkets *ICA Kvantum* and *ICA Supermarket* – medium-size stores with several sub-sections; and *ICA Nära* - a micro-scale neighbourhood convenience store with very simple organisation and few employees. The organisational structure of the independent stores varies, largely influenced by store size and owners (Andersen et al. 2013). Figure 6 illustrates the examples of organisational structures typical for small- (*ICA Nära*) and medium-sized (*ICA Kvantum*) ICA stores respectively.

[42] The empirical studies referred to in the footnotes as MVE students' group were performed by a student group on the MSc course "Policy approaches for preventative environmental actions" held in spring 2013 at IIIEE, Lund University.

[43] ICA Group Sustainability Report 2012. URL: http://reports.ica.se/ar2012sv/Materiale/Files/ICA+årsredovisning+och+hållbarhetsredovisning+2012_opt.pdf. Accessed 8-10-2013.

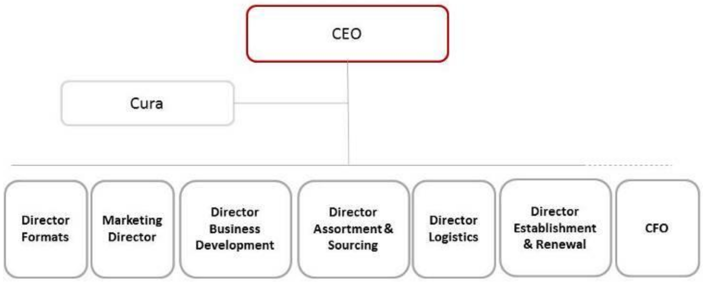

Figure 5 Organisational chart of ICA Sweden.[44]

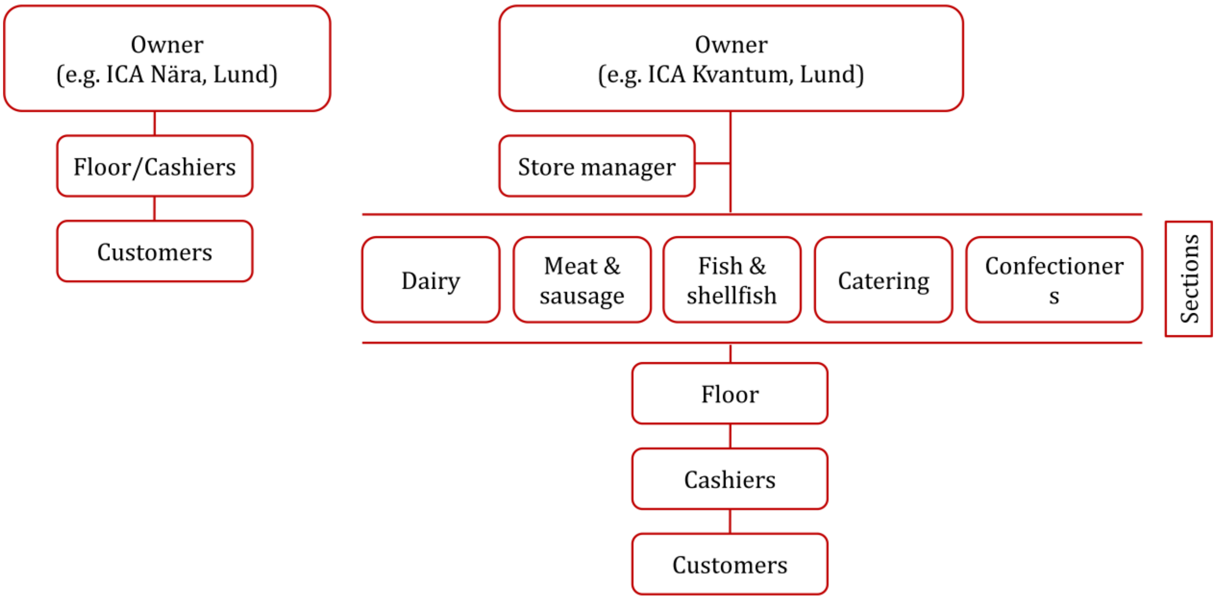

Figure 6. Organisational charts of two sizes of ICA stores: small (ICA Nära) and large (ICA Kvantum) respectively. [45]

Kooperativa Förbundet (KF) is a federation of 39 consumer co-operatives in Sweden. Coop Sverige is a retail group, part of KF, with groceries retail as its core business activity. In 2012 KF united 39 different consumer co-operatives, represented by 3.3 million consumers as members. Statistically, almost every Swedish family is a member of KF through their membership in local consumer co-operatives. In a way, consumers own the KF and its Coop Sverige business branch with its 341 Coop stores in Sweden.

KF has five business areas: Coop Stores & Supermarkets Ltd., Coop Media Ltd., Coop Property Ltd., Coop Investment Ltd. and Coop Other Activities Ltd. groups. The group relevant to this study is Coop Stores & Supermarkets Ltd., which manages four brands of retail store chains (Coop Konsum, Coop Extra, Coop Forum, Coop Bygg) and online retail Cooponline.se. The support organisations (Coop

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[44] Linvall, Kerstin. (2012). Personal communication with Director of Quality and Environment at ICA headquarters. Conducted by Sigríður D. Jónsdóttir, Stockholm, 2-7-2012.
[45] Billing, Anna (2012). Personal communication with Project Manager at ICA Norra Nobellöv. Conducted by Sigríður D. Jónsdóttir, Lund, 21-6-2012.

Inköp & Kategori, Coop Marknad, MedMera Bank and Coop Butiksutveckling) are also part of Coop Stores & Supermarkets Ltd. retail group.

The organisational structure of the retail group is divided into corporate (central level) senior management and a tactical team where each store chain is represented. *Coop Stores & Supermarkets Ltd*. in Sweden runs the four major physical retail chains, which are the hypermarket *Coop Forum*, supermarket *Coop Konsum*, and the convenience stores *Coop Extra* and *Coop Nära*, totalling 700 shops throughout Sweden in 2012.

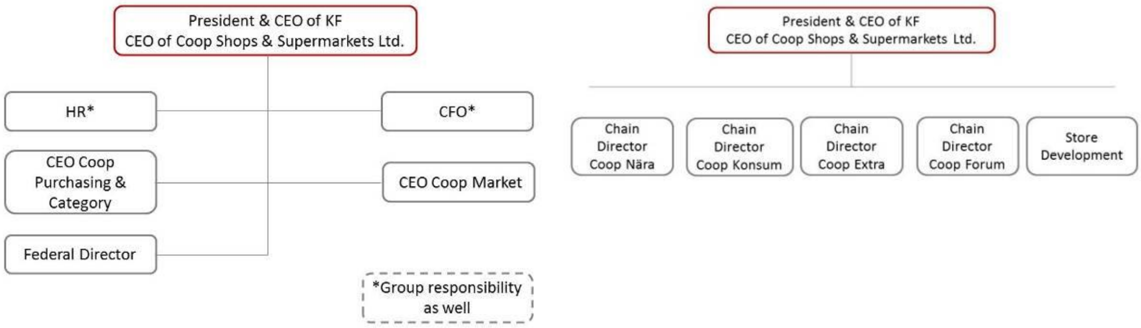

Figure 7. Organisational structure of Coop Stores and Supermarkets Ltd., divided into corporate senior management of Coop Shops & Supermarkets and tactical team (left to right respectively) (Jónsdóttir 2012).

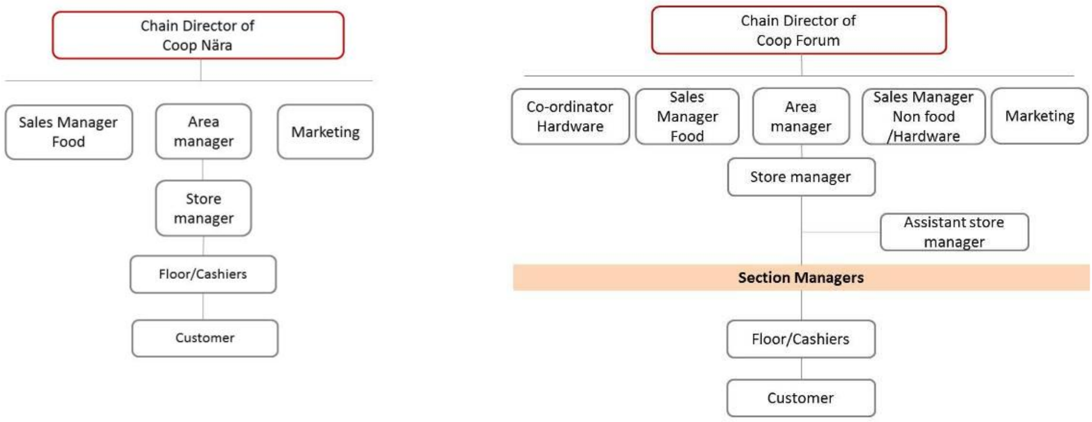

Figure 8. Organisational structure at store level: Coop Nära (left) and Coop Forum (right) (Jónsdóttir 2012).

The organisational structure on the level of the retail group is shown in Figure 7. This shows the management of *Coop Stores & Supermarkets Ltd*., which is divided into corporate senior management of Coop Shops & Supermarkets and tactical team. A more detailed description and chart concerning the organisational structure of Coop can be found in Coop's annual report.[46]

[46] ICA Group Sustainability Report 2012. URL: http://reports.ica.se/ar2012sv/Materiale/Files/ICA+årsredovisning+och+hållbarhetsredovisning+2012_opt.pdf. Accessed 8-10-2013.

The organisational structure of business chains (*Forum/Konsum/Extra/Nära*) is the same within each chain but varies between different chains. See the organisational structure of Coop Nära and Coop Forum in Figure 8.

In the following sections, we describe innovation processes in Coop and ICA and the roles played by central and store levels at various different stages of the innovation process. The text is based on interviews and empirical observations of ICA and Coop stores in the Lund and Malmö area.

4.3.2 Innovation process - ICA Group

The ICA Group operates by the franchising model and, compared to the Coop model, is a decentralised organisation. The central level of the company is responsible for strategic issues, such as sourcing, supplies and logistics, increasing revenues and introducing fundamental changes concerning the brand and the corporate business model. Strategic decisions are then introduced and, if accepted, implemented in the organisation. Department managers of the individual stores are then made responsible for approving and mobilising innovative ideas to implement those strategic decisions made by the central level (Jónsdóttir 2012).

An example could be ICA's strategy to implement innovative energy and material efficiency solutions in their new construction projects, where corporate managers play the main role in developing such strategies. The top management ensures that high-energy efficiency standards are implemented before the new buildings are sold or leased to an individual storeowner. For existing buildings, the central level also helps to improve energy efficiency, but mainly by taking a more passive role, e.g. commissioning energy consultants to evaluate and implement various energy efficiency measures.

Other examples of corporate inputs include strategies for improvements in waste management and waste minimisation. Waste management primarily involves improving the quality of waste sorting. Waste minimisation is addressed by focusing transport packaging, and maintaining optimal inventory and quality of foodstuffs so that food losses due to expiration are minimised. Responsibility for monitoring these programs is usually allocated to individual stores, which may choose to self-monitor with their own resources or hire consultants for this purpose. Decisions on implementation of ideas are always made by individual storeowners. They decide what investments to make and how and to what degree follow the strategic directions taken at corporate level (Andersen et al. 2013).

Sometimes innovative ideas can come from the central level of the ICA Group, but most of them in principle are *generated* at the store level (Figure 9). Both employees and store owner/manager can be idea generators:

> "*…the store has weekly management group meetings and staff meetings. Ideas grow out of these meetings. The influence of central ICA level is very low, but they offer support and help*".[47]

Suppliers and other organisations (e.g. Fair Trade) are also becoming involved as "inductors" for innovative changes (Jónsdóttir 2012). Equipment providers too can instigate innovations, particularly

[47] Larsson, Urban (2013). Personal communication with store manager at ICA Supermarket Bellevuegården. Conducted by MVE students' group, Malmö, 21-1-2013.

in the case of energy-efficient products, such as lighting, ovens, fridges and refrigerators (Andersen et al. 2013).

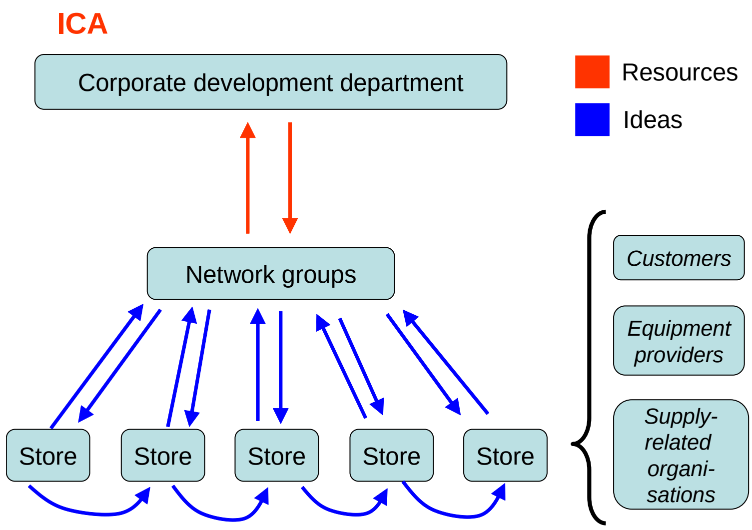

Figure 9. How ideas flow in ICA (Andersen et al. 2013).

Most interviewees stated that staff members are encouraged to put forward ideas even though the majority of the interviewed stores, especially the convenience stores, lack formal routines or systems for idea collection. Few stores developed reward systems to encourage and engage the staff. Personnel are rewarded if the suggestion is implemented in practice. To further inspire new ideas some stores take their staff on study visits to larger stores, especially flagship stores where many new innovative ideas are implemented. This is particularly interesting as, in principle, ICA stores are in fact direct competitors (Andersen et al. 2013).

The ICA Group has a corporate intranet used to communicate and disseminate new ideas, both by the central level and individual stores (Jónsdóttir 2012). However, generally the bulk of communication of innovative ideas takes place within the stores, between the stores and in the local network groups. There is much less exchange of ideas from and to the central level (Figure 9).

In the majority of the observed ICA stores, customers are encouraged to put forward their ideas for in-store innovations. Some stores conduct customer surveys a couple of times a year asking for their opinion on how store operation could be improved in terms of convenience, efficiency and environment. Some stores engage customers, informing them of social media such as ICA's Group's Facebook or Twitter pages, which are used for consumer feedback and proved useful in creating store-specific product offers or solutions to display the products that meet customer preferences (Jónsdóttir 2012; Andersen et al. 2013). Indeed several of the interviewed ICA stores actually pointed to customers as being their main generators of ideas; for example:

> *"...the customer has the greatest influence. There are no formal solutions for handling customers' ideas, but the culture in the store is open for criticism and customer ideas".*[48]

[48] Larsson, Urban (2013). Personal communication with store manager at ICA Supermarket Bellevuegården. Conducted by MVE students' group, Malmö, 21-1-2013.

Many stores had suggestion boxes where the customers can leave their opinions and ideas. In few stores customers received a small reward when they left a suggestion in the box (Andersen et al. 2013). However, there seems to be little formalised or structured systems in place to process customers' inputs, as the following indicative interview response suggests:

> *"Ideas are suggested by customers and are delivered via our staff. There is a suggestion box for positive or negative customers' comments, and contributors can take an apple or a sweet upon leaving a suggestion. Staff can also write down consumer's ideas".*[49]

According to our findings, in most cases there is no formalised structured approach for choosing the innovative solutions from the central level of ICA management, and their implementation is decided by the individual stores. The managers and storeowners are the ones who *screen* the ideas and have the power to decide on which innovative ideas should be taken up and implemented (Jónsdóttir 2012; Andersen et al. 2013).

The procedure for following up innovation performance and outcomes varies according to the size of the innovation and its nature – radical or incremental. Extensive changes and their results always appear to be documented, while documentation and follow-up of incremental changes is typically left up to individual stores. In some ICA stores the store managers collect, document and store the ideas for later use. In other cases, typically among convenience stores, this process is less organised, as store managers perceive formal documentation as too time-consuming and keep the ideas in their heads (Jónsdóttir 2012; Andersen et al. 2013).

However, some of the interviewed ICA stores have a more organised innovation process. The store's managerial team discusses the ideas in regularly scheduled meetings; this is particularly common in larger stores. Such meetings could also span several independently-owned ICA stores on a weekly or bi-monthly basis and organised though dedicated network groups formed in advance for various discussion topics. In such meetings new ideas, experiences of investment projects and optimising operating costs are discussed. For example, one group consisting of *ICA Kvantum* stores has jointly discussed, planned and implemented large investments to make them more cost efficient (Jónsdóttir 2012).

In some instances representatives from the central level were involved in the stores' network meetings. The interests of the central representatives typically involve gathering ideas from individual stores and sharing those ideas that have proven to be successful (Andersen et al. 2013).

The nature of the innovation seems to play a role in how innovations are taken up and communicated. Generally all stores share the ideas internally during staff meetings, through the intranet or in-store information boards. External innovations are typically communicated through advertisements in newspapers, Facebook, Twitter and the monthly ICA consumer magazine *Buffé*. The 'major', i.e. more expensive, ideas are typically communicated and discussed internally. However, the communication of smaller incremental innovations may differ in that small improvements are sometimes just decided individually by the store owner or manager without any internal discussion.

[49] Schultz, Gert (2013). Personal communication with store manager at ICA Kvantum Emporia. Conducted by MVE students' group, Malmö, 20-2-2013.

Most of the observed stores do not communicate about innovation at store level directly to the customers (Jónsdóttir 2012). Communication between the stores (including competitors) plays an important role not only in sharing new ideas but also dispelling myths that preclude innovations. For instance, there still is a prevailing opinion that putting doors and lids on refrigeration equipment is a bad idea, because it hinders the customers and may affect their purchasing volumes:

> *"There are still many stores which do not dare implement changes such as doors and lids on the refrigerators since they believe that consumers are going to lose interest".*[50]

Some individual stores could become hubs for innovation from where ideas spread to other stores and retail chains. For instance, there is a clear interest in reducing food waste caused by expiration date. *Ät snart* is a concept of selling short-date products at a reduced price, which originated in ICA Maxi Södertälje (Lagerberg-Fogelberg et al. 2011). This store modified its sales practices and adjusted the supplies and inventory management, which in 2012 resulted in a 20-ton reduction of food waste. ICA's central office since then was active in spreading this idea to other ICA stores.[51] Similar practices can also be found in Coop stores (e.g. Coop Forum Mobilia in Lund).[52]

Another approach is *Resurskocken* (Swedish for "resource cook"), which involves in-store preparation and sale of food made from short-date products, which was introduced as an innovation by procurement manager Stefan Billing in ICA Kvantum Malmborgs Tuna in Lund (Expressen 2011). The store not only reduced its food waste but created an additional source of revenue (Malmborgs Tuna 2013). This idea is also practiced by Coop.[53]

4.3.3 Innovation process - Coop

Coop represents a centralised organisation structure. Its central management team plays a key role in driving changes throughout the organisation down to individual store level. At central level, a specific group works exclusively with innovative ideas and implements them throughout the organisation. The central management level makes all the strategic decisions, including in-store innovations. At the same time the degree of involvement of central level is determined by the nature of innovations. Small incremental changes are usually handled at store level:

> *"… approximately 90% of all decisions about running costs are made by the central office, if these are not too detailed in nature".*[54]

All significant changes at corporate level and innovative examples from the stores are followed up and compiled in regular sustainability reports (Andersen et al. 2013).

Within Coop, innovative ideas originate both from within and outside the organisation, from members, suppliers, and other retailers. The company is working to create a more systematic and

[50] Lindström, Sven-Erik (2013). Personal communication with store manager at ICA Nära Karlavägen. Conducted by MVE students' group, Stockholm, 19-2-2013.
[51] Axelsson, A. (2013). Personal communication with sales manager at ICA Maxi Stormarknad. Conducted by MVE students' group, Södertälje, 6-3-2013.
[52] Winqvist, J. (2013). Personal communication with store manager at Coop Forum Mobilia. Conducted by MVE students' group, Lund, 27-2-2013.
[53] Nilsson, K (2013b) Personal communication with store manager Coop Konsum Mårtenstorget, Lund, Conducted by MVE students' group, Lund, 28-2-2013.
[54] Nilsson, Kent (2013). Personal communication with store manager at Coop Konsum, Mårtenstorget. Conducted by MVE students' group, Lund, 28-2-2013.

well-defined way to collect such information. Employees can put forward their ideas in a number of ways, by writing on designated boards, using the intranet and mailboxes, various forums or workshops. There is a ‘creative post box’ system where employees can post ideas for consideration by the executive directors. The press and communication department will then screen these ideas.

Other stakeholders such as customers can put forward their ideas through the Coop Customer Service Department (Jónsdóttir 2012). In fact, our interviews showed that most of the stores know their customer base and listen carefully to their demands by creating store-specific offers that meet customer preferences. This seems particularly to be the case when it comes to the demands related to product offers, but even suggestions for running the stores seem to be noted to some degree (Andersen et al. 2013).

The central management encourages employees to be innovative by organising competitions and, in some cases, good ideas are announced publically. Some stores have a reward system for innovative ideas, which could include verbal praise, feedback or rewards such as cinema tickets. In the convenience stores, innovation ideas are mostly gathered from other Coop stores (Jónsdóttir 2012).

Energy is the fourth largest cost item in the organisation, so there is a strong incentive to work actively with new innovations to cut energy costs. The company has a system for energy monitoring and management to monitor the environmental performance of the company as a whole (Andersen et al. 2013). The company also participates in *Energijakten*, which awards companies for their work on energy savings. The innovations in this area typically include optimisation of electricity use in cooling/freezing equipment, energy-efficient lighting, heat recovery from ventilation systems, and use of excess heat from refrigerators to heat the premises. For instance, ICA Kvantum in Sannegården, Göteborg uses combined heat pumps with a heat recuperation system from the refrigerator equipment to heat the premises. The store also implemented movement detectors to control in-store lighting, which dims the lights by 70% when there are no customers in specific areas.[55]

Some stores have energy-efficient lighting of car parks and facilities to recharge electric vehicles (COOP 2012). Also, many of the buildings owned by the company use renewable energy sources for heating. When the premises are leased, then it is the building owner who decides which energy or heating system to choose. The result is that the use of renewable energy is considerably lower in such premises (Andersen et al. 2013).

Several communication channels are used for information exchange in Coop, including intranet, emails, information bulletins, personnel newspaper, and regular weekly or monthly meetings. All of these are effective formal ways of documenting and sharing information. The intranet offers a particularly good opportunity to share good work routines and ‘best practices’ within and between the stores. Several interviewees mentioned that they use ‘best practices’ to find new ideas that they can implement, and that ‘best practices’ also creates a forum where stores and staff can receive recognition for their own innovations.

In smaller stores (e.g. convenience stores) there are less formal forms of communication – these are often verbal, less structured, and much less documented than the channels in larger stores. Some of our interviewees mentioned a diary where the staff can write down ideas and complaints. However,

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[55] Ågren, T. (2013). Personal communication with energy coordinator at ICA’s head office. Conducted by MVE students’ group, Stockholm, 1-3-2013.

it is unclear the degree to which this documentation is instrumental in facilitating innovation processes (Andersen et al. 2013).

Coop also arranges network meetings for the stores in the same chain format and from the same geographical area. The aim is to help spread innovative solutions at local level. The local groups meet regularly, ranging from once a week to once every quarter. Two to four times a year all the network groups in Sweden meet and share their experiences of marketing, sales and operational issues (Jónsdóttir 2012).

Figure 10 illustrates the principal pathways of information flows with the organisation. Through internal communication channels there is a formalised information exchange within and between the stores. Through regional chain format network meetings information is exchanged vertically with regional management level, and with the central level at the annual meetings of the entire organisation. The central level in turn communicates with the sub-levels through its development department (Andersen et al. 2013).

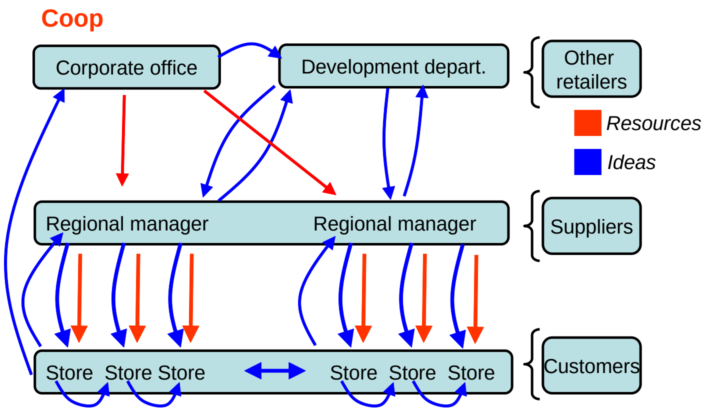

Figure 10. Flow of ideas in Coop (Andersen et al. 2013).

Resources to implement the ideas are distributed top-down, in addition to the resources of the individual stores. If the stores or network groups come up with more radical ideas, these are forwarded to the area manager who gathers all suggestions from the area and forwards them to the central management (Figure 10). At central level the ideas are either rejected or approved. If they are approved, funding is given to the stores in question to implement the innovation (Andersen et al. 2013).

> *"The store manager contacts the regional manager and communicates possible ideas. The regional manager then contacts Coop's central office for approval. Then resources from the central level are channelled down to regional management level, where regional managers then decide how the resources will be divided between individual stores. If a store wants to run, for example, an energy efficiency improvement that spans a longer time period than that planned by the central office, the store must then send a special request for investment permission, which could easily be rejected".*[56]

[56] Nilsson, Kent (2013). Personal communication with store manager Coop Konsum, Mårtenstorget. Conducted by MVE students' group, Lund, 28-2-2013.

Many stores do not collect innovation-specific data after the implementation of the idea, but some store managers do evaluate the success of the innovation despite the lack of a defined innovation process (Jónsdóttir 2012).

Incremental ideas can often be implemented by a store manager without the involvement of central management. In hypermarket-sized stores, where the management team is usually bigger, a group of managers is involved in the generation of ideas, screening and mobilisation. Generally, there is no common set of criteria for screening ideas; it is rather a matter of personal opinion. In some large stores, there is a managerial team that consists of the store manager, assistant store manager and section managers. This team discusses and processes the ideas that have been put forward.

When new investments are made, a set of performance indicators and procedures are in place for the estimated payback time, but eco-innovations are managed slightly differently. Eco-innovations are often of a preventive nature, so it can be difficult to calculate the actual savings. In some cases there is no evident economic gain; in that case what is evaluated is how the eco-innovation will affect Coop's image and brand (Andersen et al. 2013). Most store managers state that finance is the main driver for any innovation, along with creating better working environment, saving time and ensuring customer satisfaction (Jónsdóttir 2012).

4.3.4 Evaluation of innovation processes in ICA and Coop

The evaluation below follows the five-step innovation evaluation framework suggested by Desouza et al. (2009) as described in Figure 3.

Generation and mobilisation. As demonstrated in both organisations, innovative ideas can emerge from all levels within the stores, and also externally from consumers, other retailers and suppliers. The central level of the ICA Group has a stake only in the generation of innovations that are of fundamental importance to the overall ICA brand. The owners and managers of individual stores are behind all other innovations that do not affect the brand as such. Coop, on the other hand, is very active at central level and makes all strategic decisions regarding innovations, except for very incremental ideas, which are handled at store level. Coop also has a specific group at the central level for innovation and implementation.

Idea generation at employee level is more organised in Coop. Here the employees can put forward their ideas in numerous ways (designated boards, intranet, forums, workshops, creative post boxes). Coop also offers a more organised system for encouraging the generation of ideas (reward and recognition systems, positive feedback, small gifts). Coop's central level is also more pro-active in organising competitions to encourage employees to be innovative (e.g. the *Energijakten* competition). ICA stores, on the other hand, are less systematic and more individualistic in this respect. This is evident from rewards to staff for implemented ideas or individual store initiatives to engage and reward customers.

Advocacy and screening. This step of the innovation process is rather vaguely systematised in both organisations. Neither the ICA Group nor Coop has defined criteria for screening or management of ideas at store level; each store has its own procedure. Within the ICA Group it is the storeowners and store managers that conduct the screening and decide whether or not to proceed with an idea. An indicative observation is that in the larger store formats (both ICA Group and Coop) it is more common to have a somewhat more organised innovation screening process, where the managerial team regularly discusses the new ideas and decides which ones to implement.

Both ICA Group and Coop also have network groups that hold meetings at various intervals to discuss new ideas, and some ICA stores also invest jointly to make the implementation more cost effective. The main difference between ICA Group and Coop in this step is that Coop stores and networks have to forward more radical ideas to the central level for approval.

Experimentation. The experimentation stage is unstructured in both organisations, since all ideas are different and require different methods of testing. Ideas are tried out in the stores, but we did not see any firm evidence of a structured follow-up process with accurate documentation of changes directly attributable to single innovation rather than the operational performance of the entire store. This makes it difficult to accurately determine the degree to which the innovations were successful.

Within the ICA Group, documentation regarding performance is dependent on departments at store level. Interviews with Coop stores revealed that most managers do not evaluate and keep track of the success of innovations, while only a few mentioned that they monitor the success of innovations by looking at sales numbers. Outcome is likely to be based on estimates by equipment providers; typical answers in the interviews were "*according to power ratings, equipment X reduces electricity costs by approximately 15%*"; "*we think payback time is 2-3 years*"; "*with the energy-efficient lighting we saved about one-fifth of all the electricity used"* (which is unlikely, as typical electricity consumption in a store is about 25% of the total, including cooling and freezing).[57] On the other hand it is understandable that monitoring energy savings of an individual appliance is impractical or too expensive.

Radical ideas in both organisations are documented more than incremental ones. Documentation and follow-up is more common in Coop, where the central level funds the radical ideas.

Commercialisation. This stage is closely connected to communication of the innovation as a way to commercialise it both internally and externally. There are numerous tools, depending on the size of the store, for communicating innovations internally. Examples are staff meetings, email and phone, information boards, and TV screens. Smaller shops are normally more stressed due to the small number of staff, which probably forces them to reduce the number of meetings to a minimum or simplify them by informal ways of communication. This also results in less documentation. Intranet was often mentioned during the interviews as an effective way of sharing ideas.

In Coop, for instance, there is a specific section of the intranet designated to best practices. Information can also be disseminated by email, in diaries and in network meetings.

As for external communication, many stores state that they do not communicate internal infrastructure-related innovations to their customers, as they think these are visible and obvious or not of interest for the clients. A few store managers, however, mentioned that they sometimes put up signs in the store to make innovations more visible for the customers.

In the ICA Group major innovations are communicated through the intranet, while incremental ideas have no particular method of communication; it is up to each store. The central level ICA Group communicates externally by advertisements, whereas some storeowners use Facebook, Twitter and

[57] Interviews with Coop Forum Mobilia, Lund; ICA Nära Jägaren Nöbbelöv, Lund; ICA Supermarket Bellevuegården, Malmö, (several interviews during February-April, 2013)

mail-outs to communicate with their customers. However there is a great lack of communication between the store level and customers.

Diffusion and implementation. Implementation of successful ideas in numerous stores is more prominent in Coop due to the central organisation structure. If the implementation is successful, the innovations can diffuse further through the organisation. Implemented ideas diffuse both between stores as well as between the central level and stores. This type of interaction facilitates the overall innovation process and innovation success of Coop.

The ICA Group, with its decentralised organisational structure, consists of franchises, which in reality are independent competitors. This means that engaging in diffusion between stores is rather limited except for the network groups where ideas are discussed and co-funded. This could obstruct the innovation process within ICA Group in some ways but, at the same time, could promote a greater flow of innovations, as every store has the potential to implement what it wants.

4.4 Lessons learned

There is great potential for environmental improvements of in-store operations, including good housekeeping, modernising equipment and infrastructure, optimising transport and logistics, and preventing and minimising generation of waste. Swedish food retailers are not newcomers to the field of environmental management of internal processes, and several good practices can be found in 'doing something different' and 'doing the same thing better' even among the smallest market players.

The research presented in this chapter focused on investigating whether and how the organisational structure of retail chains influences eco-innovation, and whether it has an effect on the effectiveness of innovation. Our findings suggest that the organisational structure has only partial influence on the innovation process and that the management-related aspects (i.e. the human factor) within the stores are more likely to affect the outcomes of the innovation process.

Innovative stores can be found among both the hierarchically-managed organisations and those with little formal structure systematising the innovation process. Although the studied companies had different organisational structures and different levels of involvement of central level management, the way they managed their innovation processes was rather similar in terms of the first two innovation stages – idea generation and mobilisation of ideas and advocacy and screening. These initial stages are often unstructured and innovation outcomes still have an unclear link to the organisational structure.

In both types of organisations the innovation process often depends on the creativity of individuals, their personal engagement and their ability to carry their ideas into practice, rather than the organisational structure. However, the availability of resources to support such individuals and a system to operationalise these resources may play an important role in implementation of innovations. Resources might not necessarily be in the form of financial support, but may instead include more organised processes, knowledge pools and solicited human resources in terms of expertise and skills.

In the innovation stage of *idea generation and mobilisation*, the most significant difference in the two case studies is where most innovative ideas germinate. This depends on where in the organisational structure the responsibility for innovations and development is allocated. In centralised organisations (e.g. Coop) it is more likely that the innovative ideas originate high up in the organisational structure, whereas in the decentralised organisations (e.g. ICA) these emerge more at store level (primarily store managers, but also ordinary employees).

Coop has a specific group that engages only in innovation and implementation, something that the ICA Group seems to lack. Coop's central level also has a more structured approach to encourage and stimulate its employees to innovate (e.g. competitions, reward schemes). In contrast, ICA's central level has less focus on the encouragement of innovation, leaving it to the individual stores.

Employee motivation and various ways to engage them effectively are important factors at the initial innovation stages. Engaging employees by training, facilitating networking, formally assigning responsibilities and introducing reward systems are important ways to stimulate innovation processes. Coop's central level seems to be more involved in the generation and mobilisation of innovations in-store than the central level of the ICA Group.

The main difference in the *advocacy and screening* stage of the innovation process is that Coop store managers and networks have to forward more radical ideas to the central level for approval, whereas ICA's storeowners and store managers have most of the decision-making power.

In both cases the companies' central levels have network groups that work on the development of innovative ideas for their stores. The group operating at Coop has greatest responsibility for the innovations. In ICA, the central group does not have the same role, since the individual stores have main responsibility for implementing innovations. Nevertheless, it is the network groups (both at central and store levels) that have an important role for spreading the innovative ideas. This is especially important for ICA stores.

Both companies are engaged in the *experimentation stage* in rather similar ways; these could be characterised as informal and unstructured. The procedures for documentation and follow ups are clearly diverse. Store managers in both companies generally state that small innovations entail rather little documentation and follow-up. Radical changes are followed-up to a greater extent, especially within Coop as the central level funds their implementation and demands some form of evaluation of their investments.

In the *commercialisation stage* there are many similarities between the two organisations in terms of means of communication used. These methods vary, but the common feature is that small stores rely more on informal methods with less documentation, while the larger stores spend more staff time on meetings and more structured forms of discussion, such as network groups and study visits. In this stage of the process, ICA Group has a disadvantage as each store has to finance its own innovations and rely largely on internal resources, with considerably less support from the central level compared to Coop. This carries a risk that viable innovations are discarded when adequate finances are not available. However ICA stores have the advantage of faster and more flexible decision-making as the decisions do not need to be approved at central level.

However, in the *diffusion and implementation* stage of the innovation process, it is very clear that organisational structure does play a role in terms of resource provision, documentation and external support. More centralised structures may have less flexibility in stimulating the initial stages, but they could be more effective in providing financial resources, knowledge support and ensuring a broader replication and exploitation of new ideas.

The strongest driver for eco-innovations is usually the desire to reduce operating costs, as these are important for maintaining competitiveness in the sector. The main examples of cost reduction were related to energy use (HVAC, freezers and lights), where significant savings were reported. The main driver for improvements proved to be the store managers, i.e. those who take decisions and bear most of the responsibility. The role of central management in pushing innovations is much more prominent in the case of the centralised Coop than the ICA Group, while the role of staff as idea generator is more visible in the ICA Group. An important finding is that, regardless the organisational structure of the shops, customers are important players in influencing the selection and direction of in-store improvements.

4.5 Recommendations

Recommendations for policy-makers

Encourage energy efficiency. The construction of new buildings and refurbishment of existing ones for energy efficiency is an important area where retailers can reduce their operating costs. Combined with procurement of green energy carriers (e.g. wind-generated electricity) it could significantly reduce the environmental footprint. Swedish food retailers seem to be aware of existing energy efficiency recognition schemes, and they often use the awards in marketing. However, this sphere of competition could be much more expanded than it is today, and include other resource intensity or waste generation indicators. There is a clear role for the government in providing advisory support and information on building-related improvements and setting up award schemes for recognition of work in greening buildings.

Provide financial incentives to aid the implementation of eco-innovations. Sometimes eco-innovation may not reach the implementation stage, because traditional accounting methods typically do not account for indirect benefits and may not show sufficient economic feasibility. With this uncertainty many food retailers (especially small-scale independent retailers) may not take the risk of eco-investments. Here there could be scope for regional or national policy-makers to consider sharing these residual risks, such as by setting up a support mechanism in the form of grants and soft loans or by providing expertise to help develop and implement eco-innovation projects within a particular sustainable business development programme.

Recommendations for retailers

Improving the structure of the innovation process. Better management of the innovation process in retail organisations is critical for implementation of eco-innovation. So far, there seems to be a lack of structure with regard to how innovative ideas are created, developed into specific implementation projects and replicated in the organisation and in a large number of stores.

Swedish food retailers have a great number of innovative ideas, but the dissemination of ideas to more stores seems to be limited due to lack of communication and management structures. Smaller or individual stores, for example, may not have sufficient financial resources for investment, lack experience in project development, or have no access to information-sharing channels that would give them access to innovation knowledge pools. The central management level (especially in the decentralised companies) could play a more active role in securing such resources.

*More focus on eco-innovation*s *in-store*. Eco-innovations are typically perceived as a mechanism to strengthen the corporate brand. The more ‘popular’ innovations in this respect are often product- and marketing-related (e.g. green food, Fair Trade products) rather than operational improvements. However, there is still potential within the environmental optimisation of in-store operations (e.g. optimisation of heating, ventilation, lighting and air conditioning, improved waste management and waste minimisation, inventory management, transportation and logistics), which typically are less visible for the customer.

The retailers should share their best practice experiences more actively with each other. Communication between the stores (even between competitors) plays an important role not only in sharing new ideas, but also in dispelling myths that preclude innovations, such as the myth that doors on refrigerators reduce purchasing volumes.

Improving customer communication regarding implemented innovations. There is strong evidence that consumers are involved not only in shaping the green offers on the market but also in suggesting in-store improvements. Swedish food retailers practice various means of communicating to and collecting feedback from their customers, whose ideas are sometimes translated into in-store environmental improvements.

In order to increase consumer engagement, it is important to inform customers about the role of eco-innovations and their significance for resource conservation. People tend to be more willing to try something new if they understand why it is being implemented and can clearly see the results. Showing the consumers' role in environmental improvements could be used not only for their engagement, but also for marketing purposes. Better communication to consumers may also help manage the influence of innovations on consumer behaviour.

Recommendations for researchers

Further research on the drivers and barriers for eco-innovations. The rate of uptake of eco-innovations varies through the food retail sector, and there is still a significant knowledge gap about why some organisations are more innovative than others. Innovative ideas in organisations undergo complex multi-stage development and it is important to understand how these ideas emerge, take shape, and materialise in tangible outcomes. The approach taken in this research was by no means statistical and was limited to a small sample of food retail chains represented by two retail brands.

Our findings that the organisational structure has only partial influence on the innovation process and that the human factor is more likely to affect the outcomes of the innovation process are indicative, but not conclusive. Consequently, it could be valuable to explore the *link between different forms of organisation and the success of innovations in a larger sample of cases*, perhaps from different retail sub-sectors.

5 Downstream activities of Swedish retailers to promote sustainability

This chapter provides an overview and analysis of how Swedish food retailers work to promote sustainable consumption. We start by describing the complicated reality facing Swedish food retailers, who are under public pressure to promote sustainability to their customers while market demand is often low.

The chapter is structured as follows. In the introduction section we outline the difficult situation food retailers are facing when promoting sustainable consumption. We emphasise the 'attitude-behaviour gap' as an explanation for why retail efforts to promote sustainable consumption are often hesitant and inconsistent. We then present four strategies identified in our study that retailers adopt to deal with this reality: 1) branding, 2) niching, 3) influencing societal discourse, and 4) contextualisation of sustainability in stores. Our analysis aims to understand these strategies in the light of the societal and market pressures retailers are facing in their efforts to promote sustainable consumption. The chapter concludes with lessons learned from our research and recommendations for retailers, civil society/NGOs, policy-makers and researchers interested in enabling sustainable consumption.

5.1 Introduction

The complexity of sustainable consumption for retailers discussed in section 1.1 is aggravated not only by the vagueness with which society treats sustainability, but also by the wide gap between consumer expectations and consumer action.

Much debate about the promotion of sustainable consumption is based on the premise of informed and caring consumers. In political and societal debates, as well as green marketing literature, the focus is often on enabling consumers to live up to their own personal ethical ideals concerning consumption. Despite all the talk about the 'ethical consumer', the average consumer has not lived up to this ideal, and numerous doubts have been raised about the assumptions underlying the concept of the ethical consumer.

While it is widely acknowledged that consumers are both more aware and more concerned about social and environmental problems now than ever before (Carrigan and Attalla 2001; Peattie 2001; Peattie 2010), critics of the 'ethical consumer' idea claim that consumers' expression of good ethical intentions must not be taken for anything more than just that: good intentions (Thøgersen 2010). Soron (2010) points out that functioning ethical consumption would mean that consumers have to analyse all aspects of their life and change their behaviour in dozens and dozens of ways; a highly unrealistic prospect.

It is also claimed that consumers' (usually survey-derived) alleged high level of concern for social and environmental issues suffers from a lack of reality, not taking into account trade-offs connected to sustainable choices, i.e. changes in price, functionality, image, etc. (Devinney et al. 2010). A tongue-in-cheek claim is that consumers are cause-driven liberals when surveyed, but economic conservatives at the checkout line (ibid).

An alternative point is made by Klintman, who argues that, while consumers are very trusting of green products in terms of their lower environmental harm, another trust is often lacking – a socially-oriented trust that there are not just environmental benefits, but also cultural, group- and identity-oriented benefits for the consumer by choosing ecological alternatives, status benefits from appearing as eco-chic, or as holding a slightly alternative lifestyle (Klintman 2012).

This gap between consumers' stated willingness to act (and pay) and actual behaviour is commonly referred to as the 'attitude-behaviour gap' or 'value-action gap'. The attitude-behaviour gap has received much attention in literature on sustainable consumption. Although consumers have expressed a desire to support ethical companies and punish unethical ones (Carrigan and Attalla 2001), retailers often find that their efforts to promote sustainability only have limited success. Retailers have found today's consumers, who are often praised for thinking ethically when making consumer choices (Micheletti et al. 2006), difficult to deal with (Yates 2009).

In Sweden, although retailers have worked hard to reach the consumer and promote sustainability in food consumption, success has been modest. Claimed consumer interest continues to differ considerably from actual shopping behaviour. Whereas 81% of Swedes claim to care for a product's impact on the environment, and 50% claim to be aware of the environmental impact of products they consume (European Commission, 2009), the market share of environmentally labelled products is still marginal in most product categories (Anselmsson and Johansson 2007; Schmidt et al. 2008; Ekoweb 2012).

5.2 Review of activities based on our cases and interviews

Faced with this reality, our research has revealed several strategies for how Swedish (and international) retailers deal with the above reality, including branding, niching, influencing the discourse, and contextualisation at store level.

5.2.1 Branding

Competition in the retail sector is fierce. To differentiate themselves on the market and gain customer loyalty and trust, retailers engage in brand building where the development of a range of private brands is becoming increasingly popular within and across product categories. This trend has been particularly strong for sustainability-focused brands, where some retailers have been early-movers and quickly became market-leaders. In Sweden, Coop has historically been known as a sustainability-centred brand and its *Änglamark* brand is among the most recognised among Swedish consumers. In recent years, the market-leader ICA also successfully created a brand based on organic farming; *I Love Eco*. Recently Axfood has promoted its sustainable brand image and the privately-owned brand *Garant*.

The mechanism of private eco-branding allows retail organisations to harness gains from investments in the development of green markets in the form of brand value and customer loyalty, and thereby internalise positive externalities from market creation (Girod and Michael 2003). Furthermore, retailers' eco-brands, through their simple message and uniform design, attract attention and generate familiarity with a broader segment of the market and make it easy for less engaged consumers to find a sustainable option (Terrvik 2001).

However, achieving such consumer resonance is not easy. For this to work, product innovation requires in-depth understanding of sustainability-related issues, development of key metrics/product indicators, anticipation of future sustainability trends, understanding consumers' reasoning and predicting their responses (Hall 2001). This might require development of traditionally non-retailing expertise and skills 'in-house'. Some retailers, e.g. Walmart, Asda, and Marks & Spencer, have already replaced external consultants and established product development and packaging teams within their organisations (Hertzfeld 2010); a trend that might illustrate the growing strategic importance of private eco-brands for retailers.

Continuous interest in sustainability and increasing competition in the field of sustainable consumption seem to stimulate willingness among retailers to "push" the market towards sustainable consumption. Such efforts are often embedded in a retailer's branding strategy.

> *"[Our private brand] products have been a success, and that is largely due to their design. The success of the organic milk is due to the price, the design, and the marketing. To influence the customer you need to display it [organic food] … you can't hide it in the shelf, you need to bring it to the front. There can be food offers, such as coupons".*[58]

An example of this is ICA's private brand for organic food '*I Love Eco*', which was introduced in 2008 to follow two less successful private brands for organic food. Since the introduction of '*I Love Eco*', ICA has bypassed Coop as market leader in organic food sales, with an annual turnover of 2.5 billion SEK[59] in 2012 (Ekoweb 2013). ICA has also introduced other private brands to the market dealing with different aspects of sustainability, e.g. *ICA Gott liv* ('ICA Healthy Life') and *ICA Skona* ('ICA Gentle'; a range of environmentally sound cleaning products).

Many retailers have also developed their own sustainable 'super brands' to put all their activities under one brand name (*Pro Planet* at Rewe, *Änglamark* at Coop). Some have created specific brands for a specific cause, as witnessed in Austria, where the German retail chain Rewe has managed to make its own organic brand *Ja! Natürlich* ('Yes! Naturally') a synonym for organic agriculture (Vogl and Darnhofer 2004). The *Ja! Natürlich* brand is also used to promote home gardening (with the launch of organic seed and other gardening products, TV and radio spots, a blog, and the launch of (urban) gardening workshops), to create a positive image of organic farming in general, to promote holidays on organic farms, and to showcase Austria's national parks.

5.2.2 Niching

Retailers rarely engage with all aspects of the sustainability discourse. Instead, they choose a subset of possible areas to focus on and identify with. The process of choosing such focus areas is delicate, as interviews with retail representatives suggested:

> *"There is no answer to what is best. This depends on the perspective. That's why a company has to decide what is best and stick to it. … Sustainability was so hot that everyone wrote into their strategy plans that they would work with it, but then nobody knew how. … The important thing is to listen to consumers, to stores, to other players, and then decide as a company what to do".*[60]

The way a retailer approaches sustainable consumption is not only a result of what the external world expects and prefers, but also an evaluation of the impact of various approaches on profitability, market share and competitiveness. This requires understanding of both the societal discourse and the consumer. Unfortunately for retailers, there are many signs that consumers are followers rather than leaders in the sustainable consumption discourse:

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[58] Jönsson, M. (2012), Personal communication with store manager at Hemköp Karhögstorg. Conducted by M. Lehner, Lund, 12-3-2012.

[59] This represents about one-quarter of the total market for organic food and beverages in Sweden (Ekoweb, 2012).

[60] Hansson-Borg, A. (2011), Personal (phone) communication with Environment and Quality Manager at Bergendahls Food. Conducted by M. Lehner, 17-8-2011.

"Societal debates with many different opinions are also risky because if there is too much contradictory information the consumer gets exhausted – it's not fun anymore and the consumer does nothing. … We need to be patient with consumers until they change their behaviour. [We] need to show endurance".[61]

These statements offer an indication of how difficult retailers find it to pick the right topic(s) in their work with sustainable consumption. This knowledge-oriented retailer remark – that the 'jungle of labels & information' is confusing – is more common than remarks about identity challenges of consumers (how to strengthen their group identity, style, and aesthetics through sustainable consumption). In any case, the interviews indicated high awareness among corporate responsibility and sustainability managers of the fact that sustainable consumer behaviour has to be encouraged rather than just enabled.

"We don't think that sustainable products sell themselves. They have to be promoted. … It is so complex; we need to make it easier for consumers".[62]

One way to deal with this has been a process in which many retailers chose a focus area, which is easily communicated to consumers and an area where they can differentiate themselves. For the market leaders Coop and ICA this has been organic food, and Fair Trade has been used the same way to some extent.[63]

Even though organic food and Fair Trade have been among the most widely marketed and known approaches to sustainable consumption, the fluidity of the discourse and its lack of clear definitions have opened up for diverging approaches. For example, CityGross has invested heavily in a label called *Äkta vara* ('Genuine product'), which was established to indicate food with a minimum amount of additives. Lidl, which is not engaging much with organic and Fair Trade food, has concentrated on communicating its sustainable fish policy. In the UK, some retailers have decided to engage with a public discussion about food waste (the *Love Food, Hate Waste* campaign) and created their own approaches to it. In Switzerland, Coop has recently launched a new brand, *Ünique*, under which it will start selling vegetables and fruits produced in Switzerland that are imperfect in appearance (storm- damaged, uneven shape, over- or undersized), but fully edible.[64]

What a retailer chooses to focus on is therefore the result of its internal expertise, societal discourse, media attention, consumer preferences, and competitors' strategies. The number of niches a retailer decides to engage with seems to depend on the overall strategy and brand image, as well as in-house expertise, with market leaders often more willing to work with several sustainability niches while market followers often choose only one or two areas.

[61] Krantz, J. (2011), Personal (phone) communication with Environment Manager at Willy's. Conducted by M. Lehner, 10-8-2011.
[62] Baumann, P. (2011), Personal (phone) communication with former Quality Assurance and Environment Manager at KF Sweden and employee at Svensk Dagligvaruhandel. Conducted by M. Lehner, 17-8-2011.
[63] Not to the same extent as, for example, in the UK, though, where Co-op UK has invested heavily in its association with Fairtrade.
[64] http://www.Coop.ch/pb/site/retail/node/77610431/Lde/index.html

5.2.3 Influencing the discourse

Next to branding and niche management, retailers have also started to engage actively in the societal debate. This has resulted in them influencing public opinion on sustainable consumption and thereby societal understanding of sustainability and market expectations.

The best-known example is the way retailers work with organic farming. From being passive players in the organic farming movement, with most initiatives coming from civil society, retailers have evolved into driving forces behind the development of the sector (Thøgersen 2010). Examples can be found in many countries.

In Austria, Hofer (part of the Aldi group) is currently engaging in an attempt to redefine organic farming in the eyes of the consumer. In 2006, Hofer launched the *Zurück zum Ursprung* brand ('Back to basics'), which not only lives up to the legal standard for organic farming, but exceeds it and establishes its very own higher brand-related standards. All *Zurück zum Ursprung* product ingredients are exclusively sourced and processed in Austria (with elaborate source tracking possibilities for each product), the contracted farmers use "traditional farming techniques" (e.g. only grass feed for milk cows, sour dough for bread production, no use of additives and no use of genetically modified organisms), and the brand supports small-scale farming in Alpine regions by providing better-than-average contract conditions for participating farmers including long-term co-operation and price premiums above normal (Lindenthal et al. 2010).

Through the *Zurück zum Ursprung* brand Hofer is investing heavily in consumer education about the ecological footprint concept, with every product containing information about its CO_2, water use, and biodiversity performance. With the *Zurück zum Ursprung* brand, Aldi Austria is reaching out to schools (education material about the ecological footprint is available free of charge) and concerned consumers (via social media). Hofer carries out its work under the slogan *So weit muss Bio gehen* ('This is how far organic has to go') and uses the prominent voice of the Austrian 'organic pioneer' Werner Lampert to raise the *Zurück zum Ursprung* brand above other organic products and to criticise conventional agriculture for being industrialised.

Other initiatives have been campaigns and product and service innovations in co-operation with non-commercial (i.e. civil society, government agencies) and commercial partners (i.e. independent certification organisations, producers). In Sweden, Coop has pioneered a sustainable fish policy. Based on co-operation with the WWF, Coop has edited out all red-listed fish and helped to change the entire retail industry, with all major Swedish retailers now following Coop's example.

Retailers in the UK worked on raising consumer awareness about food waste. In a campaign ('Love Food, Hate Waste') coordinated by WRAP (the Waste and Resources Action Programme), retailers designed various in-house campaigns (e.g. Sainsbury's 'Love Your Leftovers' and Morrison's 'Great Taste Less Waste'). Overall, these campaigns are said to have had considerable success in bringing the topic to the attention of the average consumer (Flanagan and Weatherall 2013).

In Sweden, the retailer-based food magazines distributed regularly to members – *Mersmak* (Coop), *Buffé* (ICA), and *Salt & Peppar* (Hemköp) – all promote various aspects of sustainable consumption. In 2010, Hemköp launched the *I Säsong* ('In Season') campaign. The campaign focuses on seasonal foods, and is promoted through very visible in-store promotion and the distribution of well-designed magazines focusing on seasonal produce.

Some retailers choose to not only direct their communication towards consumers, but also engage directly in the political debate, informing the public and lobbying politicians. In the UK, The Co-op has long been a vocal supporter of the Fair Trade movement, engaging in the public debate for fair trade practices between the rich and the poor world. In Austria, as a response to the pesticide and bee-protection debate in the EU and the Austrian government's initial decision to vote against the ban of the blamed 'nionicotinoids', the two retail giants Rewe (in Austria: Billa) and Aldi (in Austria: Hofer) joined the chorus of criticism and were outspoken in campaigning for more initiatives to protect bee colonies. Billa aired a TV commercial vilifying the sellers of these pesticides and started to promote bee-friendly gardening. A similar bold act was performed by Coop in Sweden as early as 2002, when it made a TV commercial vilifying pesticides in general and arguing for the superiority of organic food. However, Coop was taken to court for this advertisement, which was eventually banned.

5.2.4 Contextualisation at store level

Success in promoting sustainable consumption also seems to depend on the adaptability to local contexts (i.e. the shopping reality of the customer). A good example for contextualisation of the sustainability debate comes from ICA. While ICA AB's company-wide approach to promoting sustainability in food consumption resembles that of its competitors, the multi-layered organisation has led to a broad variety of additional and widely diverging initiatives and innovations, emerging from individual stores.

In addition to ICA AB's Sweden-wide initiatives to operationalise sustainable consumption, some individual ICA stores have become hubs of innovation. Their work often results in successful and much noticed (and copied) approaches to encourage and facilitate sustainable food consumption practices. Numerous ICA stores across Sweden have earned a reputation for their work to promote sustainable consumption. Several of the ICA stores researched for this study have shaped the societal debate about sustainability and developed their own approach to sustainable consumption, adapted to their local context. For example, several of the ICA stores visited in this study offered examples of a strong focus on promoting various aspects sustainable food consumption in the store; examples are large images of natural food production and Fair Trade conditions, prominent positioning of labels (KRAV, Fair Trade, MSC), and a broad range of sustainable products.

ICA stores often act as 'translators' and 'facilitators' of the sustainable consumption discourse in their local markets, and this has led to a variety of innovations. ICA's particular organisational structure favours a model for promoting sustainable consumption where stakeholder pressure and customer demand are managed differently within the organisation. The organisational structure allows individual stores to relate to the sustainability debate in a way that fits the market conditions within which they operate (i.e. degree of interest among consumers, willingness to pay, degree of local pressure to live up to aspects of the sustainability debate[65]), but also their personal interests and those of their staff.

ICA store owners stated that knowledge of the context and the customer base were success factors for promoting sustainable consumption in the store. Such knowledge was also important for niching

[65] Both the municipalities of Lund and Malmö, for example, are 'Fairtrade Cities', a fact that clearly influences the degree to which interviewed stores in these two cities work with Fairtrade as part of their sustainability work.

and store-specific offers that meet customer preferences. Local niching within the ICA organisation has resulted in some stores focusing on local food, some on vegetarian/vegan diet and others on labels such as green and Fair Trade. Maria Smith, ICA AB's corporate responsibility manager, pointed out the potential for innovation and adaptation to local market conditions this approach offers:

> *"The amount of work ICA stores put into sustainability varies greatly. It depends on the owners' interest and external pressures. … One of [our] strengths is that we are flexible. … It should be easy to do right [for the consumer]. There are [many of our] stores across Sweden and they have different conditions in the different municipalities".*[66]

This statement is in line with how interviewed store owners described successful work with sustainable consumption, stressing the necessity to relate to the local market environment. The statement also shows how innovation in sustainable consumption is a process rather than a decision, with retailers entering into a continuous trial-and-error process of (implicit) negotiation with numerous consumer groups about acceptable interpretations of the societal discourse.

At ICA, the central unit deals with stakeholder pressures (such as the WWF) or competition (e.g. Coop's marketing focus on organic food). The result is market offers applied throughout the organisation as a way of appeasing external pressure (e.g. not selling red-listed fish to keep up with Coop) or following society-wide trends.

Individual ICA stores focus on the unique store-customer relationship of each store as its main source of inspiration. This has led to a significant variety within the ICA organisation and how sustainable consumption is dealt with at store level. The organisational structure has allowed for locally adapted innovations in retail; some stores sell only certified (organic and Fair Trade) bananas, some sell a range of sustainability-oriented products matching that of the most specialised all-organic stores, some actively develop regional supply chains (direct-sourcing of locally produced food), and some have promoted new services to deal with food waste.

The organisational structure promotes context-specific interpretations of sustainable consumption, but all are based on an understanding that remains within the dominant societal discourse.

5.3 Evaluation of retailer activities

We found that retailers adopt three major strategies to tackle the difficulty of defining sustainability and bridging the gap between societal and consumer expectations and consumers' shopping behaviour: 1) they engage with customers and try to convince them of the advantages of sustainable consumption, 2) they disconnect the societal discourse from market reality, and 3) they engage in the societal debate and try to influence it.

5.3.1 Engage and convince consumers

In order to foster sustainable consumption, a retailer must create the right 'habitat' in which sustainable consumption can thrive (Peattie 2001). Retailers have tried to overcome the attitude-behaviour gap and increase market demand in numerous ways. As Chkanikova and Lehner (2013)

[66] Smith, M. (2011), Personal (phone) communication with Environment and Social Responsibility Manager at ICA Sweden. Conducted by M. Lehner, 17-10-2011.

describe, these attempts often focus on four pillars: 1) increase availability/choice, 2) follow market developments and incorporate trends into sustainable product and service offers, 3) create trust in the validity of sustainability-oriented labels and brands, and 4) make sustainable products and services affordable.

Retailers have considerably increased availability, choice and affordability of green products through private brands. Coop, for example, markets itself as offering the largest range of green food in Sweden, while the Axfood-owned discounter Willy's markets itself as offering the cheapest range of green food in Sweden.

Creating a 'habitat' for sustainable consumption requires a lot of work by the retailer. It also requires engagement with the societal debate and translating it into simple guidelines for consumers. Successful attempts to promote sustainable consumption also depend on the engagement with the local context. Not only has each retail chain a certain consumer segment as target audience, each store is also exposed to a location-specific debate about sustainability, which results in a specific logic regarding sustainable consumption. This contextualised logic can be shared among consumers of competing stores in one area. At the same time it may vary greatly for different store locations in the same retail chain. Successfully connecting to different local understandings of sustainability has proved to be a successful lever for retailers to promote sustainable consumption, as the example of ICA proves.

5.3.2 Disconnecting societal discourse from market reality

Retailers' successful promotion of sustainable consumption is a process of finding ways to bring together societal discourse and their supply-chain reality and market demand. However, our research points to an alternative. Instead of trying to find solutions that suit stakeholders as well as shareholders and consumers, retailers could aim to keep the societal discourse separated from the market.

One example is the discursive focus of retailers on the 'sovereign' and 'ethical consumer', by which retailers manage to pass on some of the responsibility for changes in market behaviour to the consumer. In many of the 32 consumer interviews conducted for this study, the narrative of the sovereign consumer was identified. The idea of stores and retail chains influencing consumer behaviour was usually played down by these consumers. They were aware of the influence that retailers exert on consumer behaviour, through marketing and store design. Consumers certainly believed stores tried to influence customer behaviour and related stories about misleading offers, product placement and store design. However, few consumers admitted they were influenced. Instead, interviewees said they knew what they wanted when they entered the store, often bringing shopping lists, and that they would not react to attempts to trick them into a purchase. Nevertheless, this claim remains to be tested against consumer practices.

The overall perception of the role and responsibility of retailers with respect to sustainable consumption was that they are helpful and already quite active. On the other hand, retailers were rarely believed to be responsible for consumer behaviour. One consumer reasoned in the following way:

> *"Stores do not do so much because people are perhaps not so interested and then they don't earn money out of it". (Anonymous consumer)*

Even less criticism was expressed towards individual stores and store owners, who are often perceived as restricted in their opportunities to influence consumers. In general, such stores were viewed in a more positive light than the overall retail chain they belonged to. Even where consumers felt stores fell short of sustainability or acted in a way that was counter-productive to sustainability, the perception was that they were usually not to blame. Consequently, the lack of pro-active action to promote sustainable consumption did not seem to have a negative effect on the consumer's general perception of the store.

While shortcomings did not seem not to have a major impact on the interviewed consumers, and were perceived to be caused by the system we all live in, actions taken to promote sustainable consumption in the store were perceived as positive by consumers. They were interpreted as a sign of commitment to sustainability.

5.3.3 Engage in the sustainability discourse

The fluid definition(s) of sustainable consumption also offer an opportunity for retailers to actively influence the societal debate to their advantage. Historically, the term 'sustainability' has been defined by scientists, policy-makers and – not least – civil society, but retailers are increasingly engaging with the discourse. With the increasing market share of sustainability-oriented products, and the establishment of retailers' privately-owned brands, this trend is likely to continue.

5.4 Lessons learned

Increasing retail Involvement in the eco-market

With the growth of markets for sustainable products and services, a very visible trend is that retailers are taking an active role in market development. In their marketing and branding activities, retailers are able to incorporate a high degree of flexibility and continuously adapt to public debate and consumer preferences.

This may partially compensate a problem associated with third-party eco-labels. Boström and Klintman (2011) argue that one of the biggest disadvantages of third-party labels is their focus on production and consistent insensitivity to consumer demands. This is often justified by the necessity for standards, rules and scientific accuracy. Retailers' eco-brands, for example, offer a way to translate and 're-package' this production focus of third-party labels. By combining various third-party labels, adding supplementary criteria, and customising the narrative to various niches, retailers not only differentiate themselves on the market, but are also more likely to become more reflective and adaptable to (changing) consumer interests, concerns and expectations.

Support for this assumption can be found in Anselmsson and Johansson (2007), who studied CSR in Swedish food retailing. They compare Swedish retail with that in the UK, and argue that Swedish retailers' introduction of a new generation of private brands (i.e. not imitating existing products at lower prices but investing in innovation and creating new products) might be interpreted as a sign of intensification of retailer efforts to introduce sustainability into their market reality. At the same time it opens the door for another increasingly visible approach to sustainable consumption: taking the lead not only in market activities, but also by shaping the definition of sustainability in the societal discussion.

Increasing confidence in the positive impact of retail work in promoting sustainable consumption

Our results suggest that retailers are gradually becoming an institution that proactively sets and implements sustainable consumption, together with civil society and policy-makers. While independent organisations continue to fulfil an important role in ensuring that democratic processes are applied in setting and implementing standards, the role of these independent organisations is changing. Instead of being a market shaping force that sets and manages the sustainability agenda, they are starting to contribute to the debate that cooperates with retailers in their efforts to green food production and consumption. In the future, retailer work on sustainable consumption is likely to develop in collaboration with independent institutions, such as KRAV or Nordic Swan, that provide quality assurance and reduce transaction costs.

Through their more active role in sustainable consumption, retailers have won the confidence of policy-makers and the general public. Many of their activities have received widespread acclaim for their commitment and effectiveness. In England, Marks & Spencer was awarded 'Responsible Retailer of the Year 2011'[67] for its ambitious 'Plan A'[68] to make the company 'the world's most sustainable retailer'.[69] In Scandinavia, Coop has strongly linked its brand name with organic farming and been named 'Sweden's most sustainable brand' in 2011 and 2012 by the Sustainable Brands survey (which surveyed 3000 Swedish households).[70] In 2010, the German retail giant Rewe was awarded the 'German Sustainability Award' in the categories 'most sustainable initiative' and 'most recycling-friendly company'.[71] In 2009, Aldi Austria was rewarded the 'Austrian Climate Care Award' for the 'Zurück zum Ursprung' brand ('Back to basics').[72] The Finnish market leader Kesko boasts of being one of the 'Global 100 Most Sustainable Corporations in the World' for eight consecutive years since the ranking was initiated in 2005.[73] This high level of trust in retailers' ability to successfully work with sustainable consumption offers retailers a high degree of freedom in deciding how to work with sustainable consumption and consumer behaviour.

Strong focus on more sustainable consumption, little focus on less unsustainable consumption

While it was acknowledged that external pressure is essential and regulatory intervention often necessary for sustainable consumption, many interviewees from the retail sector expressed fears about inefficient regulation harming their business or distorting competition. Some retailer organisations felt that over-regulation would hamper innovativeness, making it more difficult to justify sustainable consumption in business strategy. To prevent this, an entrepreneurial approach to sustainable consumption was stressed as a practical and favoured solution.

On the other hand, limitations of self-regulation also became clear in our work. Despite of their awareness about the need to facilitate changes in 'unsustainable' parts of consumer behaviour, retailers expressed an unwillingness to do this. Swedish retail representatives remained sceptical to the idea of editing out some products in order to promote sustainable consumption. Choice editing was usually described as difficult, risky and bad for business. One CR manager referred to the situation regarding meat:

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[67] Oracle World Retail Awards
[68] Marks & Spencer advertises this bold commitment with the slogan 'There is no Plan B'.
[69] http://plana.marksandspencer.com/about
[70] http://www.sb-insight.com/companies-in-sustainable-brands-2013/ranking-2013/
[71] http://www.rewe.de/nachhaltigkeit/listing/nachhaltigkeitspreis.html
[72] http://www.klimaschutzpreis.at/start.asp?b=68&vid=95&id=79
[73] http://www.kesko.fi/en/Responsibility/Topical/Kesko-on-The-Global-100-Most-Sustainable-Corporations-in-the-World-list/

"[we] would not be able to remove meat from our shelves on the basis that it is better for the environment, because [we] cater to the majority".[74]

Retailers also receive support for this position from consumers. According to our interviews, consumers feel that, if anyone should be allowed to decide what is available in stores, it was the government, and not retailers. Consumers do not expect retailers to engage with their routine behaviour to encourage more sustainability. For them, retailers seem to come last in the hierarchical order of who to hold responsible for implementing sustainable consumption. Retailers therefore have little incentive and face little pressure to engage with unsustainable consumption behaviour. Fears of losing competitiveness on the market and consumers to other retailers were often mentioned as reasons why retailers were reluctant to engage with existing unsustainable consumption habits, for example through choice editing of products.

Retail engagement in green consumer niches and trends

Our study and literature review indicated that only consumers who had adopted sustainability (or aspects of it) as a lifestyle seemed to repeatedly assess whether their shopping decisions correspond with their values. This small, but growing, group of consumers even goes beyond 'voting with their wallets' and chooses to invest time, energy and money into creating sustainable consumption habits. They often do so by engaging with groups of like-minded people or act as leaders in their immediate community (Little et al. 2010). At the same time they are distributed across society socio-culturally and socio-economically, and by no means represent the stereotypical affluent middle class that can afford to pay more for healthy and trendy food. These consumers contribute to new forms of food production, distribution and consumption, which are slowly spreading into the mainstream market, and thereby enact the ideal of the reflective citizen-consumer.

Retailers appear increasingly willing to support these groups, readily adopting niche trends and promoting them to mainstream consumers. One example from our study is ICA Tuna in Lund, which translated the increasing concern about food waste into a ready-meal service. This was not only well received by consumers but also generated goodwill (triggered by positive media coverage). Building on the same consciousness among consumers, Coop in Lund has started to market ripe (brownish) bananas as 'perfectly ripe' for smoothies.

Another sustainability-inspired niche trend that retailers have helped to make popular is the recent boom in gardening (particularly in cities). Coop was early out with its *Änglamark*-branded organic gardening soil, and several retailers are now encouraging consumers to start growing their own food. Billa in Austria (part of the Rewe chain) has gone a step further and is offering (urban-) gardening workshops. It therefore seems likely that retailers will focus more on sustainable consumption innovations and will show an increasing willingness to engage with civil society or sustainable consumption niches.

5.5 Recommendations

After this multi-facetted overview of downstream activities of retailers in relation to consumers, a few final remarks and recommendations are provided.

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[74] Domeij, Å. (2011), Personal (phone) communication with Environment and Social Responsibility Manager at Axfood. Conducted by M. Lehner, 25-8-2011.

Recommendations for retailers

Work with several sustainability-oriented niches.

In addition to on-going strategies for increasing markets for green products through eco-labelling and green marketing appealing to the environmental consciousness of consumers, there are other possibilities for retailers. They could investigate different 'shades' of consumers, not only green and brown consumers, but also health-conscious, hippy, voluntary simplifiers, consumers with preference for local foods or whole foods, and many other shades and sustainability-oriented niches and consumer segments. This would help to include groups that have neither the resources nor the interest to pursue 'eco-chic' lifestyles stereotypically ascribed to parts of the urban middle and upper-middle class.

Moreover, as consumer choices are partly an issue of social identity and a mark of social distinction, certain consumer groups may not yet have found sustainability-oriented niches where they feel at home. Consumers, including those engaged in sustainability, have a social motivation to distinguish themselves not just from groups that are not engaged in sustainability, but also from other sustainability-oriented groups, so there is a strong need for several, supplementary sustainability niches. By working with several sustainability niches, retailers could play an important role in influencing sustainability definitions and 'discourses'. There is great potential for retail chains to expand the variety of connection points to sustainable consumption, and thereby reach a broader range of consumer groups.

Integrate with the local and regional context

The role of retailers as a crucial part of society's wider sustainability governance would benefit from better integration with local and regional culture, NGOs, and public agencies. Such integration into local context, of course, greatly depends on the organisational structure of a retail chain. How responsibilities are distributed within a retail chain impacts on the level of sustainability governance.

In Sweden, certain chains, such as Coop, carry out their main sustainability-oriented planning at central level. Individual retail stores typically have a passive role in sustainable consumption, adopting decisions issued from a higher organisational level. Other chains, for instance ICA, are based on the great independence of the local retail store. Such a structure seems to allow more collaboration with the local region: local producers, local initiatives (e.g. Fair Trade city), local interests (e.g. veganism) and so on.

More centralised decision-making is greatly influenced by discussions and collaboration with independent players, such as NGOs, eco-labelling schemes or government institutions. However, there is a difference in where inspiration for a retailer's work on sustainable consumption comes from. From our research we conclude that retailers can increase their ability to find niches of sustainable consumption when decision-making on how to influence consumer behaviour is left to a more local level (i.e. the retail store).

At the same time, there are limits to the retail store's independence. Due to large contracts along the distribution chains, even the most innovative and sustainability-oriented ICA stores are limited in their freedom to choose ways to promote sustainable consumption. Even in a scenario where stores are given higher levels of autonomy to adapt sustainability to the local customer base, central retailers' input and guidance will remain crucial for appropriate action.

Take advantage of the vague definition of sustainability for activities in the store

Sustainable consumption remains unspecific, and needs to be translated into something concrete, both as a concept and as a practice. Although this vagueness is often criticised, not least among retailers, there are signs that it does allow ample scope for creativity. Although eco-labelled products are the conventional focus, our empirical studies and examinations of previous retail work offer many examples that go far beyond eco-labels. Cooking and selling food at a lower price, food that would otherwise go to waste, is one example; promoting vegetarian diets through provision of recipes is another. Innovative methods for transporting food home is yet another example, but this is less prevalent among the big retailers than we had expected.

Recommendation for civil society and NGOs

Follow, engage with, and scrutinise retailer work to promote sustainability

Retailers have become far more than passive providers of sustainability-oriented products triggered by existing consumer demand. Retailers are increasingly becoming a crucial, proactive part of environmental governance. The very notion of governance is that all realms of society are involved in managing sustainability challenges – not just government, academia, and civil society, but also the market. Partly through fear of more stringent environmental regulation, and partly following expectations of higher consumer demand, retailers and chains are integrating sustainability into their daily work, not least in their communication with consumers.

As part of their work to develop consumer confidence, several retail chains are branding many products, often through sustainability arguments combined with a lower price premium than other eco-labelled brands. Third-party eco-labels are commonly used on these branded products as another way to boost consumer confidence, at least initially. Third-party labelling is typically organised and controlled by NGOs, and is a very important instrument for avoiding green-washing and excessive consumer confusion about the validity of sustainability claims by retailers.

However, the interaction between the retail sector and NGOs on sustainability issues should not end with labelling criteria. Since there are many other parts of food retailing with sustainability-related impact, aside from that represented by a label, it is crucial that NGOs become involved both in stimulating and scrutinising retailer activities that go beyond the eco-labelled products in the store. The creative retail activities in the store described above represent a few such activities.

The risk is of course that retailers use their increased power over the meaning of sustainable consumption to downplay the importance of addressing challenging issues that only make business sense in the long run. Here the role of NGOs as a discussion partner and trigger for change is invaluable. Furthermore, the role of NGOs is vital when retailers need help with initiating a society-wide or sector-wide support for some of their actions.

The importance of this role is visible in the case of Tesco UK, which decided a few years ago to focus heavily on climate change. The company not only launched the *UK Climate Action Week* – an annual week-long focus on climate change and consumption – but also decided to carbon-label all of its products. Tesco also launched a homepage focusing on climate issues, and invited consumers to engage with the topic. Tesco did not manage to influence the behaviour of its consumers to any great extent though, nor did it benefit from the integration of climate issues into its brand strategy. Also, other UK retailers did not follow its example. As a result of poor market response and lack of support from the retail sector, Tesco has now considerably scaled back its customer-oriented work to engage with climate change. The company has given up on the carbon-labelling and stopped its contribution to the *UK Climate Action Week* (which is now run independently).

This case demonstrates the importance of stimulating wider societal and sectoral collaboration with, for example, NGOs, to ensure that such retailer strategies have long-term sustainability outcomes. On the other hand, NGOs have traditionally played a monitoring role in relation to various businesses, especially when it comes to such less standardised and institutionalised (not supported by independent third-party certification) work to promote sustainable consumption. NGOs also have an important role to play in defining sustainable food consumption.

Recommendations to policy-makers

Facilitate and monitor the above activities

Policy-makers and governments should monitor, and where possible, facilitate the activities of the food retail sector aimed at stimulating sustainable consumption. This includes encouraging forums for multi-stakeholder dialogue and mutual learning across the retail sector, and among consumer groups, NGOs, and public agencies.

However, facilitation and encouragement is only one of the tasks of policy-makers; the other important task is to monitor green claims made by the retail sector in marketing practices, to prevent consumers becoming misled and confused.

Policy-makers must remain active, if not leading, players in addressing unsustainable consumption, as our research has identified considerable limitations in what retail-led and self-regulated efforts are able to accomplish.

Recommendations for researchers

Engage with local contexts

Researchers working with the value-action gap in food retailing must pay more attention to the local context, in which food consumption decisions are made (Lehner 2013). The vague and disputed definitions of sustainability have led to widely differing interpretations and actions. Understanding consumer action and retailers' role in it requires a more contextually informed understanding of consumption. This more informed understanding of actual consumer behaviour would probably make the much debated 'value-action gap' less of an enigma to both researchers and interested stakeholders, such as marketing managers.

6 What does the future hold for food retailers?

This chapter gives the reader a glimpse into the future of food retailing, and is based on the insights arising from the discussions of the two focus groups that met in Lund and Stockholm. The participants represented Swedish food retailers – both large mainstream chains (Coop, ICA and Axfood), and small independent eco-food shops – and individual consumers, representatives of the retail trade association (Svensk Handeln), the Swan eco-labelling organisation, and consumer interest organisations.

One of the goals of the focus groups was to discuss future trends relevant to the sustainability work of food retailers. Awareness of future trends helps food retailers to prepare for forthcoming market demands and to develop potential strategies to deal with societal expectations in the future. Several trends emerged in the discussions, ranging from macro-economic issues, such as increasing food prices, to micro-economic issues, such as individual consumer behaviour.

More food retail forms in response to diverse consumption patterns

The trend towards greater diversity in food retail forms – supermarkets and hypermarkets, local ecological and health food stores, Fair Trade and convenience stores – is likely to continue. The different types of stores will cater to different consumer needs and target different groups of consumers.

> *"I don't believe in the concept of today's massive stores with everything being sold in one place. I don't think it will exist in ten years; there will be more e-commerce and more culinary shops, shopping squares, and the smaller finer stores that will be more widely spread instead."*

Although everybody needs food, food consumers are a very diverse group. Some prefer a large range of choices in shops, while others are happy if stores only focus on the most essential products.

> *"Some consumers want a lot of choices and others want default solutions."*

One important trend that emerged during focus group discussions is the different consumption patterns of consumers on week days and at weekends. There is a growing interest in food in society in general, if the sheer quantity of food programmes – celebrity chefs' tips during the morning news, Masterchef and baking competitions, etc. – is anything to go by. Food is becoming a status symbol. On the other hand, lives are becoming increasingly stressful and time becomes a valuable resource. So an emerging food consumption pattern is that people either shop in convenience stores or order food online and get it delivered on weekdays; at weekends they visit high-end concept boutiques[75] that offer a greater diversity of specific products, and that have a story to tell about either the product or different ways of preparing it (e.g. coffee shops and tea bars).

> *"I think grocery bags are here to stay ... maybe to quickly fix meals on weekdays and then add a bit of luxury from an indoor market at the weekend."*

The different patterns of food consumption sometimes also spill over into ecological or ethical features of products when there is time to look into them:

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[75] http://johanochnystrom.se/om-oss/konceptbutiken/

"We feel that consumers are a bit inconsistent. They perhaps have ready-made meatballs or fish fingers on weekdays, fast and cheap meals, and then at weekend more sumptuous cheese and perhaps locally produced food ... and find tasty food in delicacies and similar places. The consumer is not always consistent with buying ecological ... is more ambivalent."

Demographic changes, such as the ageing population and the growing number of single-person households, also play a role in food consumption patterns and levels, increasing demand for ready-made meals and processed food.

"In Stockholm, 43% of people live alone. They're not inclined to cook every night for themselves – it's easier to buy something ready-made, quick and easy."

Families comprising two working parents and children are increasingly looking for short-cuts in food preparation. This trend is likely to continue in the future.

Another interesting trend observed in the focus groups was the seemingly decreasing number of young people obtaining driving licences. If this trend continues, this might increase demand for close-to-home convenience stores rather than for shopping malls, to which consumers have to drive.

"I read that fewer young people are taking driving licences nowadays than before. And this means that the stores that you can walk or bike to will be the most interesting ones."

Sustainability as a vehicle for retail sales

The current sustainability and CSR work in the retail sector is likely to continue. However, instead of being the goal, sustainability will be seen as an inseparable part of the business, serving as a vehicle for retailers to attract consumers, increase competitive value and secure long-term profits and reputation. This will have implications for how sustainability is marketed to consumers. Rather than appealing to ecological values of consumers, green and ethical products will be sold either as part of modern lifestyles of high social status or as 'a hygiene factor' that is just there.

"I think we will see more and more stores with a focus on sustainability ... Even cafés have food sales nowadays and then it's very often organic products that are sold ... That's the whole point – starting from sustainability. That's the foundation... and then we try to choose items to sell that fit into the concept. A bit like Whole Food, although I absolutely don't think that it will be so big… but certainly moving in that direction."

Redefining sustainability marketing

In order to sell sustainability to different consumer groups, focus group participants from retail chains and stores talked about the need to redefine what sustainability is – from being the normative civic-duty issue to being defined in terms of experiences, and a fun and cool thing to do.

"I believe in experiences, in another type of marketing – that a store sells organic products because they are healthy and luxurious."

The focus groups also saw a shift in the communication strategy, from arm's-length communication towards an open and trustful dialogue between food retailers and consumers. Much of the communication is based on the increasing understanding of product-related environmental and social impacts in the supply chains, but also on the changing level of openness among market players. This improves consumer understanding of the complexity of issues.

> *"It's increasingly important to take a stand [about sustainability] and become more personal, and to be able to back up the position with incentives or to express it in the store in some way. And there I think that future technology will actually communicate more about these values."*

Another shift that is taking place and will continue is the marketing of not only product-related information, but also communication about the company in general, its brand name and the kind of promise with regard to sustainability it delivers.

> *"A clear discussion starts about the added values – not only at product level, but also from a brand perspective – and it's because consumer and retailer want a relationship. It's linked to a promise ... Consumers don't want to buy cool sneakers or cool clothes that are dirty in terms of trademark or brand name."*

> *"Stores may offer cooking classes as well, e.g. how to best save leftovers or something. It's very nice ... creates this good feeling about the brand."*

Sustainable values will also be a factor when businesses are choosing not only their partners in value chains, but also their commercial neighbours and locations.

> *"We've had discussions with Barrista because we're happy to cooperate. Barrista also wants to be situated close to Coop. The fact that we both have sustainable values can reinforce each other's value and brand."*

Enabling healthy and sustainable diets

One trend that has recently started to emerge in the UK and USA is that food retailers are slowly extending their role from simply providing access to different types of food products towards becoming specialists in customised and specialised diets for individual consumers. Some retail shops are hiring dieticians to address specific needs of some groups of consumers. Combined with increased digitalisation and consumer profiling, retailers increasingly contribute to the social side of sustainability by ensuring healthy and sustainable diets of their consumers.

> *"In England, you can get the help of a dietician who works in the store and can help consumers with diet and what products to buy for their particular blood type or diseases. ... If you can connect the health aspect to the environmental issue better then it will be easier to get stores to sell organic products, and this may also help stores to choose their clientele better."*

Growing concerns about obesity and the role of retailers in shaping more sustainable eating practices was also touched upon in the focus groups.

Further digitalisation of food retail

Participants of the focus groups were in consensus that retail space will be more and more digitalised. They talked about IT-based customised solutions to fit the markets of ever-demanding consumers.

"I think much more use will be made of apps. We have test stores where you can find goods using an app. You make a shopping list and then the app arranges it according to how products are placed in the store. The customer avoids going back and forth, and the app shows exactly where on the shelf the product is situated."

The focus groups foresee that increased digitalisation will lead to increased predictability of consumer behaviour through consumer profiling and growing potential to tailor retail offers – experiences, unique shopping environments, and channels and specialised consumer services – to individual consumers.

"It may be a digital sorting system in which the customer completes a profile: I am allergic to nuts, I like organic, etc... and the system suggests suitable products."

"Another option is the package solutions – ready-made packages of meals and dinner bags – which are convenient and where someone else has designed a suitable mix of meals."

Digital ordering of food and increasing logistics optimisation enabled by ICT are going to influence the appearance of retail outlets, their functions, and the value they provide to consumers. For example, if people increasingly order food online, both in urban and rural areas, this might redefine the role of stores. They might become a pick-up point where customers collect their orders. This would mean that the stores would have a much smaller area of selling, like a showroom with a limited basic product range, and have a much bigger storage area instead. However, according to the participants from retail chains in the focus groups, many retail areas were built in the last decade, and inertia might delay the potential shift.

E-commerce has been seen as a tool of consumer empowerment; a channel for people to express their views about products and services in a much clearer and louder way than is possible in traditional retail channels.

"With online shopping, the power suddenly goes to the consumer. The consumer can decide what they want to buy much more clearly. And it's very easy – it takes one minute instead of having to drive to a store. I think the consumer will be much more powerful, and affect the trend in a major way, because both e-commerce and apps are growing."

Food retail as part of experience centres

Retail places are swiftly turning into spaces where people spend more time, have access to entertainment and food courts, can participate in various activities, and learn about the world through products.

"What I think we will see more of are the shopping centres where stores are mixed and integrated with cafes and restaurants, playgrounds and other recreational activities, such as cinema and sports halls."

The focus group participants believed that, in order to survive the competition from online commerce, in the future traditional stores will have to offer more activities or happenings. Such trends are already visible in new shopping centres.

"I've been on parental leave this autumn. The weather's been rainy and cold, and we've stood on the playground every day, so sometimes we went to the Emporia shopping centre. They've really thought of families with kids – on each floor there are free playgrounds where kids can play and there are sofas there for us mums. They have a drawing room, a TV room, a great place where kids can run… and it's free! I think you can be there the whole day without making a single purchase. Often we buy lunch, but there are also places to heat food and change nappies. They're so smart! Sometimes we met there with my mothers' group. It was hard to find a place in town that could accommodate ten mothers with strollers."

7 Conclusions

Food retailers are critical players in driving the sustainability of the food chain and in creating markets for green products. They are often called the gatekeepers, possessing considerable power to introduce sustainability thinking into the value chains. In doing so, they face multiple challenges, starting from conceptualising what sustainability actually means for their own operations, how to strike a balance between business bottom-line, stakeholder pressure and consumer expectations, how to address the risks and uncertainties associated with continually evolving markets and societal demand, and how to turn the sustainability discourse into long-term business opportunities.

This project analysed how food retailers help to create green markets by stimulating supply of more sustainable products, by improving in-house innovation to reduce direct environmental impact from retail operations, and by helping consumers in their daily food choices by providing information, product disposition, marketing and other communication channels. Below, we outline the main lessons learned during the project and present suggestions for how the market for ecological and ethical products can be further advanced.

Retailers are playing a critical role in greening markets of products and services. All the large Swedish retail chains offer various ranges of green products and are also engaged in influencing other parts of the food value chain, including agriculture and food processing. However, markets of green products are still niche markets, ranging between 1% for Fair Trade products and 3.6% for organic products.

Green products are still often more expensive than conventional ones and are typically targeted to a small group of consumers rather than mainstream consumers. For some products there is an oversupply of green alternatives, while others experience shortages and cannot satisfy demand. Furthermore, there is lack of clear understanding of what sustainable food actually is and what kind of products consumers should give priority to in terms of a lifecycle perspective, such as local conventionally produced products or green products delivered from distant countries.

The main finding of this study is that, despite the fact that retailers are often perceived as powerful players in supply chains, they do not always have sufficient authority to coercively influence the markets of green products. On the one hand, they sometimes lack power in their relations with suppliers when they want to influence compliance with sustainability requirements. For instance, their power might be constrained in situations when there are few large suppliers on the market, such as in the coffee and fish subsectors, or when wholesale purchasing volumes are low. On the other hand, retailers are also locked-in by the institutional setting, in which green products are more expensive. This leads to the value-action gap among highly environmentally aware Swedish consumers, who are not always willing to pay premium prices for environmental quality.

This situation calls for a more coordinated and holistic approach towards sustainable consumption and production in food retail. Retailers’ work should be supported by policy measures that would make sustainable food consumption an everyday reality for mainstream consumers, not just for the relatively few people prepared to pay premium prices for healthy and clean food.

There are, however, many barriers to such a holistic approach and in this project we have identified some of them. These barriers need to be addressed in the near future!

7.1 Lessons learned[76]

The study of retailers' strategies upstream revealed that one of the most challenging issues for food production and retail nowadays is the higher production costs of green products compared to ordinary ones. To resolve this problem, some retailers are compelled to subsidise the end price of green products (usually their own brands), which undermines their business case in the short term. Many food retailers are therefore calling for policy action to set the prices at a level to make environmentally and socially sound products more attractive and competitive on the market, and thereby strengthen the business argument for sustainable consumption. This finding corresponds well with conclusions from a Nordic project conducted three years ago on the role of retailers in the transition towards sustainable consumption and production (Danish EPA 2010).

Another problem identified by retailers is low production volumes of sustainable food products, especially in some product categories, e.g. ecological chicken, or insufficient import of such products, e.g. ecological bananas. If food is produced in Sweden, then the problem is often the limited range of available produce; Swedish farmers have sufficient knowledge to produce ecological potatoes, onions and carrots, but often lack skills and information for other kinds of produce. This narrows the green market in terms of volumes and quality at the right price.

Retailers also play an important role by greening their own operations. The study of eco-innovation strategies in retail companies demonstrated a great diversity of environmental management practices that are being implemented for in-store operations, ranging from improving energy efficiency by installing state-of-the-art equipment to optimising logistics and reducing volumes of waste by good housekeeping measures.

By studying the hierarchically-managed Coop and the more decentralised ICA we can conclude that innovative stores exist in both chains, regardless of the differences in their organisational structure and degrees of involvement of central level management in the innovation process. The largest differences between the two retail chains are to be found at the idea generation and mobilisation phase of the innovation process, and at the diffusion and implementation phase. In Coop many ideas are generated or at least mobilised at central level, while in ICA this phase mostly takes place in individual shops, leading to greater flexibility in idea generation. When it comes to the implementation phase, however, Coop's centralised structures and processes seem to be more effective and efficient in exploiting and replicating innovative ideas across its stores.

Therefore, our findings suggest that organisational structure of retail chains only partially influences the eco-innovation process; other aspects, such as human factors and management practices at central and store level affect the efficiency of eco-innovation uptake at different levels in the organisation.

When it comes to retailers' involvement in shaping market for green products it seems that all major Swedish retailers are becoming more actively involved, even though their level of engagement varies greatly. Coop and ICA are eco-market leaders who also occupy the largest share of the food retail market in Sweden. During the project period, a new player entered the eco-food retail market, Axfood, which reported a 7% increase in the sales of green products in 2012. These and other

[76] In this section main lessons learned from the study are outlined. More detailed descriptions of lessons learned are presented in the relevant sections: for upstream activities in section 3.4, for in-house operations in section 4.4, and for downstream strategies in section 5.4.

players are increasingly taking an active role, not only in shaping the market of green products but also in defining what sustainability means in a retail context, and thereby contributing to the societal debate about sustainable consumption and production.

Society is responding favourably to these initiatives by displaying a high level of trust in retailers' ability to lead work with greening markets; this is shown by consumer surveys and awards. The interviewed consumers do not expect retailers to advance the work on sustainable consumption beyond greening the markets; they feel the government should shoulder this responsibility. The retailers' role was seen as providing a variety of ecological and ethical products and although choice editing – phasing out environmentally unsound products – has been suggested as a promising instrument for advancing sustainable consumption, it may potentially lead to a conflict of interests between on the one hand producers and consumers and on the other hand retailers who de-prioritise environmental or social features of products in their assortment (Gunn and Mont 2013).

Despite the growing level of engagement of retailers in sustainability work and the increasing level of trust, they continue to experience the notorious gap between consumers' willingness to pay higher prices for ecological and ethical products and consumers' actual purchasing behaviour. Here again, retailers call for policy-makers to internalise externalities so that sustainable products become competitive with conventional products, and so green markets would strengthen the business case for retailers.

7.2 Recommendations[77]

7.2.1 Recommendations for retailers

One recommendation is to *facilitate collaboration on developing a common approach to defining "sustainable food consumption" and prioritising areas for sustainability improvements*. Setting priorities in the sustainability work of retailers is not a straightforward process. Such decisions are often not only based on empirical knowledge, but are also affected by business goals and strategies and expectations of stakeholders. An open dialogue is needed between retailers, policy-makers, NGOs and consumers, both on the definition of sustainable food consumption and production and on how to set priorities for action and improve the sustainability performance of supply chain in the face of often contradicting goals.

Greater collaboration between retailers is also desirable, to agree on a clear definition of retailer sector responsibilities towards achieving SCP and common sustainability approaches to supply chain management. It is also important for placing clear demands on policy-makers with regard to creating conditions for green and sustainable markets.

Retailers could *facilitate capacity development among suppliers*, especially in situations when supply of sustainable products is perceived as constrained in terms of price, quality, volumes or product range (i.e. diversity). Food retailers may consider developing long-term collaborations with suppliers, including provision of financial assistance, business guarantees and support of supplier transition towards sustainable production practices through a knowledge base. In addition, *new incentives* should be found to motivate suppliers to provide products that are better from a sustainability

[77] In this section general recommendations are provided. More detailed recommendations are provided in the relevant sections: for upstream activities in section 3.5, for in-house operations in section 4.5, and for downstream strategies in section 5.5.

perspective. One way is to adjust shelf policies, such as by offering better placement or allocation of more shelf space for suppliers who demonstrate superior environmental and social performance.

Swedish food retailers have great potential to *further advance their work with eco-innovations that target retailers' own operations*. Environmental optimisation of in-store operations could also help to strengthen the brand name, if positive results of such projects are communicated to consumers. This could potentially improve consumer loyalty and make them proud to shop in a store that not only sells ecological and ethical products but is also reducing its own environmental impact. Clear communication could help retailers to engage consumers into taking their share of responsibility for reducing environmental impact of stores, such as by closing fridge doors and lids.

There seems to be no lack of innovative ideas in retail, but what could be improved is their translation into specific projects and dissemination to a larger number of stores. We feel there is still a lack of communication channels and dedicated management structures and/or procedures for addressing eco-innovations. There is scope for improving the engagement of central management of retailers (especially in the decentralised companies) in securing resources, such as information sharing, and providing incentives to individual stores to improve environmental efficiency.

Since consumers understand and interpret sustainability differently according to their varying preferences and interests (e.g. health, financial position, environment, well-being), there is an opportunity for retailers to further *diversify their sustainability offers to suit various consumer segments*. In addition to linking and marketing sustainability through green products to environmentally concerned consumers, retailers could *explore alternative communication messages and channels* that target consumers who value more social distinction and specific lifestyles not necessarily linked to environmental values. The private retail brands are a good starting point on this journey.

To assist with targeting different consumer groups and people with different lifestyles and social standings, the store could assume a more prominent role in *contextualising sustainability*. Marketing strategy is often formulated at central level and results in abstract messages for the local level; however, it is the local stores that know much more local conditions and can cater for the local consumer segments by adapting central messages to the local context.

In addition to exploring alternative communication channels to cater to different consumer segments, retailers could also apply responsible marketing to traditional products. For example, many stores use 'buy 3, pay for 2' offers, which promote over-consumption and potentially increases levels of food waste generated by consumers. Finding alternative ways of marketing products, e.g. by using 'price per unit' could help *promote the idea of sufficiency rather than wastefulness*.

7.2.2 Policy recommendations

The main reason for unsustainable food markets is failure to internalise the environmental externalities and the lack of other economic policy instruments to compensate for this market inefficiency. *Levelling off price differences between conventional and green products through various measures* would send the right signal to consumers and boost the market uptake of these products. This would then create a stronger business argument for food retailers to engage in sustainable practices along the entire value chain.

Policy-makers can also help to facilitate the supply of green products by offering *information support, advice and training, and subsidies to farmers* to help transform production methods towards more sustainable farming. When a low supply of sustainable products is caused by high certification costs for suppliers and poor access to certification institutions in developing countries, policy-makers could focus on building local institutional capacity and finding ways to reduce certification costs.

The retailer's ability to influence environmental performance in the supply chain is also constrained by insufficient financial resources, knowledge and expertise. This makes it difficult to develop criteria for sustainable products and to monitor products and supplier compliance with sustainability requirements.

Policy-makers could assist food retailers by facilitating the development of third-party sustainability standards and associated certification schemes. The third-party standardisation schemes could allow food retailers to minimise their costs on the risky and resource-intensive process of engaging suppliers into collaborative relationships to green the supply chain. Instead, the critical task of setting sustainability criteria and verification of compliance can be outsourced to independent certification institutions. In addition, third-party eco-labelling is of relevance in those situations when retailer influence on suppliers is constrained by the lack of purchasing power. In this case, standards replace the need for unilateral power with market power, and help companies achieve internal legitimacy, i.e. acceptance and compliance of upstream players in the supply chain.

Policy-makers can support retailers' work to green the supply chain by facilitating the development of information databases that rank products and suppliers according to their sustainability performance. A number of measures have already been initiated, such as the International Reference Life Cycle Data system[78] or SEDEX – the information exchange platform for sharing ethical supply chain information.

Policy-making has also a role to play in supporting retailers in their work to develop a *common definition of 'sustainable food consumption'* by advancing work on developing sustainable food recommendations and by monitoring green claims to *help avoid green claims that mislead and confuse consumers.*

Policy-makers have a vital role to play in discouraging unsustainable consumption practices throughout the food value chain and in society at large. They can do this by developing institutions that support green markets of products and services, such as green public procurement of food for public sector canteens, hospitals and schools.

7.2.3 Recommendations for NGOs

NGOs will have to accept the increasingly powerful role of retailers in shaping sustainable consumption. They should also be aware of their critical role as both partners in defining sustainable food consumption and watchdogs of retailers' sustainability initiatives. It should also be emphasised that NGOs are playing an increasingly vital role as sustainability service providers to players in the food supply chain. They do this by defining what is sustainable, but also by providing training, advice, information and systems for verification of compliance with sustainability criteria along the supply chain. By lending their support to some of these initiatives, and critically evaluating others, NGOs can help to further develop green markets.

[78] However, data on food products and their sustainability impact are still incomplete.

7.3 Future research[79]

Standards and certification schemes are often discussed as the information tool consumers use to alter their purchasing behaviour. Future research is needed to gain insights into *the role of standards and certification schemes from the perspective of food retailers*, i.e. the ways in which standards might resolve corporate challenges to implementing sustainability improvements in the supply chain.

Research is also needed that analyses the *diversity and co-evolutionary dynamics of eco-labelling schemes*, for example who develops and adopts standards, for what purposes, and what issues related to sustainable value chain governance are addressed by these schemes. This would further our understanding of the pros and cons of diversification versus harmonisation of standards. The implications of diversity of standards for hindering or facilitating trade of sustainable products should be also analysed.

There is still a significant knowledge gap about *why some organisations are more innovative than others*. Recognising the limited scope of this study, we propose that more research is needed to understand the dynamics behind eco-innovation processes in organisations with different structures and ways of encouraging the generation and uptake of in-house eco-innovations at different organisational levels. Innovation processes in organisations undergo complex multi-stage development and it is important to learn more about what factors cause good ideas to emerge and the circumstances under which they germinate into successful implementation. With such knowledge, more effective support can be provided both by the retail sector and policy-makers.

When analysing retailer initiatives in greening markets and improving sustainability of food supply chains, distinction should be made between the proliferation and the actual sustainability outcomes of retailer activities. Some actions might yield more successful results than others; for instance, financial incentives and choice editing could potentially engage more consumers into behaviour change than provision of environmental information and eco-labelling. However evidence on *potential effectiveness and efficiency of different instruments for shaping green markets and especially changing consumer behaviour is insufficient*. Research is therefore needed to produce evidence on which strategic choices could be made.

In order to increase understanding of the causes of the value-action gap in sustainable consumption, and to account for the different consumer segments, one potential avenue for research could be to study consumer behaviour in specific local contexts. This would offer a more contextually informed interpretation of influencing factors and a deeper understanding of consumer decisions and consumption patterns.

[79] More detailed ideas for future research are outlined in each section under 'Recommendations for researchers': for upstream activities in section 3.5, for in-house operations in section 4.5, and for downstream strategies in section 5.5.

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